

A satellite-style image of the West African continent, showing the coastline and inland features like rivers and lakes. The image is dark blue and green, with a glowing horizon line at the top.

**WEST AFRICA:
REGIONAL BROADBAND MARKET
DEVELOPMENT ASSESSMENT**

WEBINAR

For the world Bank Group
9th December 2021

By Jones Day et Progressus corporation



DISCLAIMER

- This study was carried out by Jones Day and Progressus for the World Bank and is based on a compilation and review of documents, reports and data provided by the World Bank and our analysis of other public domain data (desk review). No contribution from any ECOWAS Member States was received
- The purpose of this report is to:
 - Identify main issues that limit the developments of the digital sector in West Africa
 - Provide decision-makers with supporting materials to promote the growth of digital infrastructures / economies through adequate policies / reforms
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CONTENT

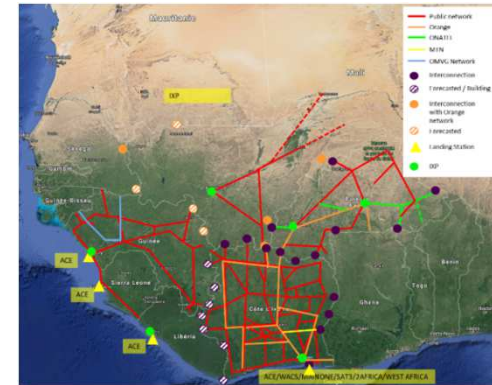
- Introduction
- Issues in relation to Connectivity & Digital Infrastructures
 - Exclusive Rights
 - Authorization and Licensing
 - Access and Interconnection
 - Rights of Ways, Public Work Authorizations, Dig Once Policy and Promotion of Infrastructure Sharing
 - Universal Service
 - Taxes
 - Lack of Implementation of Rights Granted by Regional text and Lack of Regional Coordination
 - Spectrum Issues
- Data protection
- Digital activities
- Legislative approach



INTRODUCTION

AIM OF THE STUDY

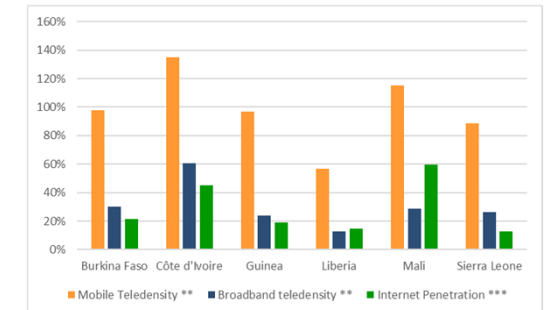
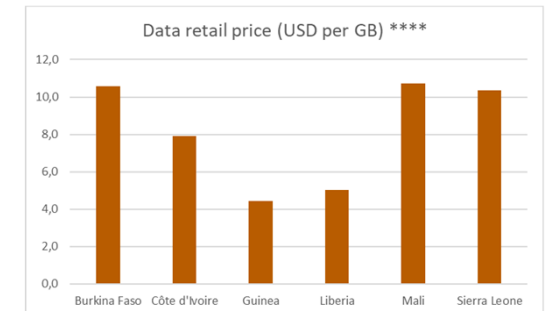
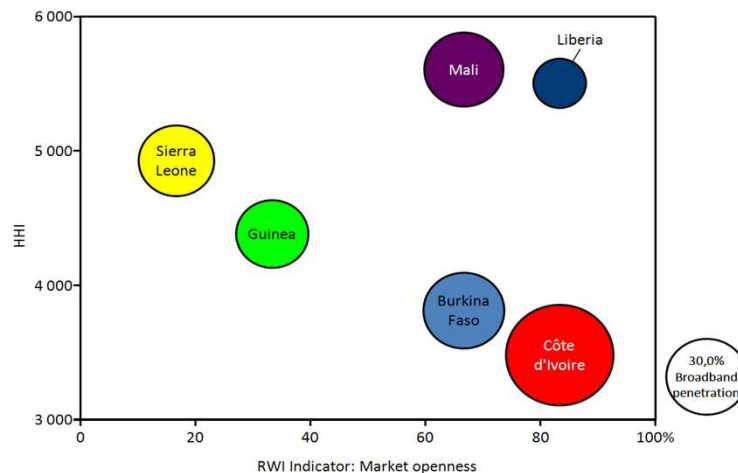
- Aim of the study:
 - Identify key issues limiting the development of digital infrastructure / connectivity / digital activities
 - Understand why such issues have not been resolved
 - Suggest critical policy reforms to move towards a single digital market
- 3 Levels:
 - Level 1 – **Connectivity and digital infrastructures**
 - Level 2 – **Data protection**
 - Level 3 – **Online regulation**



- 6 countries divided in 2 groups:
 - **Ivory Coast, Burkina Faso and Mali:** several interconnections
 - **Guinea, Liberia and Sierra Leone:**
 - Not (or only partially) interconnected with other countries
 - Only one submarine landing station each

BROADBAND DEVELOPMENT / PRICES AND MARKET OPENNESS

- Level of openness of the market: measured by the **Regulatory Watch Initiative (RWI)**
- Level of competition: measured by the **HHI** (Herfindahl-Hirschman Index)
- **Except for two countries, HHI is lower when the markets are more open (which means that the market is more competitive)**
- **2 specific situations: Mali** (two active operators and country is landlocked) and **Liberia** (limited competition and a low broadband teledensity)



** : ITU database completed by Progressus Corporation 's research, 2016

*** : <https://www.internetworldstats.com/stats.htm>

**** : Operators ' web sites and Progressus Corporation 's research, April 2020

***** : <https://isp.today/>

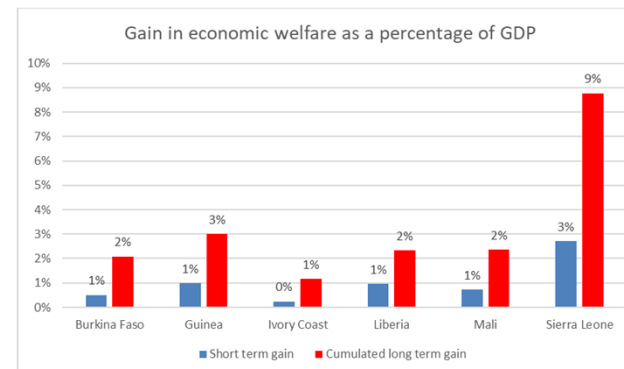
MAIN CONSEQUENCES OF THE ISSUES IDENTIFIED

Investors consideration	Issues	Impact	Expected outcome when issues resolved
Legal regimes	Exclusive rights	Prohibit players from entering digital markets	<ul style="list-style-type: none"> ➤ More players / more competition ➤ More investments / more digital infrastructures ➤ Lower cost to access to existing digital infrastructures ➤ Less duplication of infrastructures ➤ Less cost to carry out digital activities ➤ Better quality of service ➤ Price reduction
Legal regimes	Authorization and licensing	Restrict entrance of new players on digital markets	
Operation of the digital infrastructures	SMP / competition law	Lack of access / high cost to access to existing digital infrastructures	
Construction of digital infrastructures	Rights of ways, public work authorizations, infrastructure sharing	Duplication / high cost of public works / digital infrastructures	
Construction of digital infrastructures	Universal services	Lack of / limited financing of digital infrastructures	
Operation of the digital infrastructures	Taxes	High cost of carrying out digital activities	
Construction of digital infrastructures	Regional coordination / cross-border rules	No access / high cost to access to existing digital infrastructures / duplication of existing digital infrastructures	
Access to necessary resources	Spectrum	High cost of accessing to spectrum (including in rural areas / for innovative services)	

PROPOSED RECOMMENDATIONS

- Recommendations in relation to connectivity and digital infrastructures (level 1):
 - Consist of **specific actions that are clear and concrete** (no general / wishful thinking recommendations)
 - Are **relevant and effective to contribute to address the issues** identified
 - Are **realistic** (for short term recommendations)
- The Proposed Reforms concern all Countries (Burkina Faso, Guinea, Ivory Coast, Liberia, Mali and Sierra Leone) and the ECOWAS Commission

- The recommendations concern all of the identified domains and their effect has been measured in terms of economic welfare is the sum of producers and consumers surplus
- The **gain in economic welfare has been estimated at a total of more 2 billion dollars** in the mid term for the 6 selected countries, representing a **gain in GDP of 1% to 9%** depending on the situation of each country





ISSUES IN RELATION TO CONNECTIVITY & DIGITAL INFRASTRUCTURES



1. EXCLUSIVE RIGHTS

EXCLUSIVE RIGHTS ARE STILL IN PLACE

- Remaining exclusive rights:
 - **Legal grounds** (even in non public documents such as license and technical specifications)
 - **Political decisions** (e.g. refusal to grant license / authorize roll-out of digital infrastructures)
 - **De facto identification** (only one operator on a market – unless economic reason justify such limited competition)
- Activities affected:
 - **International infrastructures / capacities:** right to (i) to establish / operate international gateways (e.g. submarine cable landing stations) and related backhaul and (ii) provide international capacities
 - **National infrastructures / capacities:** right to (i) roll-out and operate backbones and (ii) provide national capacities
- States-owned operators: more likely to benefit from exclusive rights

Existing regional provisions: article 9.1 of the ECOWAS Supplementary Act A/SA. 3/01/07 on the Legal Regime Applicable to Network Operators and Service Providers

RECOMMENDATIONS

- **#1: When legislation does not formally prohibit exclusive rights, such strict prohibition should be specified**
- **#2: For broadband infrastructures:**
 - **Existing de facto exclusive rights (*i.e.* refusal to grant licenses / authorizations) should be ended through the adoption of a clear political stance on the grant of new licenses / authorizations and conditions to obtain them (objective, transparent and non-discriminatory)**
 - **Active efforts should be undertaken to introduce competition on broadband markets**



2. AUTHORIZATION AND LICENSING

LEGAL REGIMES ARE NOT ADAPTED

- Licensing requirements not adapted:
 - Many activities that could be subject to an authorization / declaration are **subject to a license**
 - **Bidding procedures are (sometimes) imposed** (even when no scarce resources are at stake)
- Applicable procedures lack of objectivity / non-discrimination:
 - **No clear and objective requirements** to obtain licenses / authorizations
 - **No guarantee** to obtain license or authorization (when requirements are met) / **no timeframe**
 - **No justification** for refusal (which are presumed) / **no recourse** in case of refusal
 - **Approval needed for declaration**

- **Political oversight enable authorities to maintain / enforce exclusive rights**
- **Owners / managers of alternative infrastructures are unable to contribute to the roll-out of digital infrastructures**

Existing regional provisions: Articles 8.1 of the ECOWAS Supplementary Act A/SA. 3/01/07 on the Legal Regime Applicable to Network Operators and Service Providers (Member States are expected to ensure “*that service based competition does not dissuade new entrants from deploying their own infrastructure*”). Article 30 sets out provisions for facilitating the establishment of regional networks by ensuring NRAs co-ordinate their procedures so that one service request can be submitted to multiple Member States

GUIDELINES FOR ADJUSTING LEGAL FRAMEWORKS

LEGAL REGIMES	PROCEDURES	ACTIVITIES
License	Bidding procedure	<p>Provision of services to end-users using specific spectrum resources (<i>e.g.</i> frequencies used for providing mobile services) <u>Example:</u> mobile licenses</p>
	Significant technical and economic requirements (as imposed by applicable legal and regulatory framework)	<p>Provision of services to end-users using other scarce resources (<i>e.g.</i> other spectrum resources or numbering resources) <u>Example:</u> provision of telephony services, provision of internet services using frequencies, <i>etc.</i></p>
Authorization	Technical and economic requirements (as imposed by the applicable legal and regulatory framework)	<p>Provision of services to end-users without using scarce resources <u>Example:</u> provision of internet services without using frequencies, MVNO, provision of value-added services, <i>etc.</i></p>
Declaration	Acceptance (without any form of approbation as long as the application is complete)	<p>Provision of services to other operators only <u>Example:</u> operation of submarine cable landing stations and national backbones to provide international or national capacities to operators, Tower Co (if regarded as an electronic communications activity), <i>etc.</i></p>
Free entry	No specific procedure	<p>No electronic communications activities or no provision of services / internal use (<i>e.g.</i> low powered and low range radio-electrical installations, fibre optic for internal use, <i>etc.</i>) <u>Example:</u> make dark fibre (IRU) available to operators</p>

RECOMMENDATIONS

- **#3: Legal frameworks should be revised to provide for authorization / declaration for activities in relation to broadband infrastructures (when no scarce resources are involved)**
- #4: Adjust legal framework to create a specific legal regime and procedure (e.g. authorization / declaration at the regional level) for:
 - National operators for activities in relation to broadband infrastructures when no scarce resources are involved (e.g. provision of IRU, dark fiber or national or international capacities)
 - Foreign operators of regional broadband infrastructures



3. ACCESS AND INTERCONNECTION

NECESSITY FOR STRONG SMP REGULATION

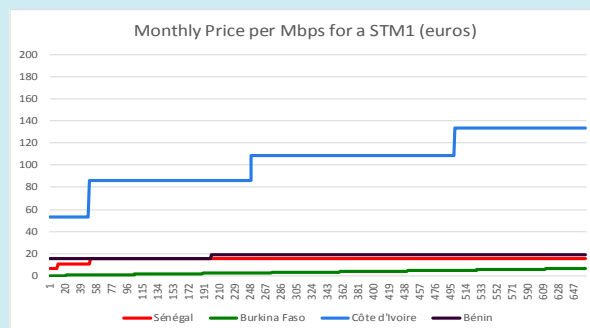
The ultimate objective of SMP regulation is downward pressure on the retail prices of fixed or mobile data, and improved service quality / coverage

- All Countries (except **Sierra Leone**) have put in place the legal and regulatory instruments for the market analysis (relevant market / SMP / remedies) but only **Ivory Coast** has effectively implemented the SMP regulation in an effective way
- Main national issues
 - Absence of relevant market analysis and regulated wholesale offers for international capacities in **Burkina Faso**
 - Absence of publicly available Reference Access offers in **Guinea** (for both SOGEB, which operates the national backbone, and GUILAB, which operates the only international access via ACE)
 - Lack of SMP legislation in **Sierra Leone** / published SMP decisions and Reference Access offers in **Liberia**
 - Absence of published Reference Access offers in **Mali** since 2010

Large variation of capacity prices / scope of services and range of capacity offers limited

- Only Burkina Faso has published prices for capacities larger than STM1 (STM1 is only 155Mbps, which is relevant for voice circuits but very small for today's broadband needs)
- In Ivory Coast, only prices for STM1 are publicly available, and they are far above prices in other countries in the region

Source: operators' website, Progressus Corporation's research (2020)



NEED FOR EFFECTIVE COMPETITION LAW

- Competition is relevant: sanction in case of refusal to grant access to infrastructures, provision of access / services under overpriced and non-acceptable commercial terms, retention of information, delays in granting access / providing services, *etc.*
- Competition law may be more effective (*ex post*):
 - More **investigation powers** (including raids and seizures)
 - More **dissuasive sanctioning powers** (*i.e.* a percentage of the worldwide turnover of the group of companies to which belong the infringing company)
- Situation at the regional level:
 - **WAEMU**: the WAEMU Commission has started exercising its powers (but not in the electronic communications sector)
 - **ECOWAS**: the ECOWAS Regional Competition Authority has been established (but is only starting its activities – its operationalization is underway)

PRACTICES	BURKINA FASO	GUINEA	IVORY COAST	LIBERIA	MALI	SIERRA LEONE
Legal frameworks / competition authority created in law	Yes	Yes	Yes	Yes <i>(the telecommunications authority (LTA) is the only authority in relation to competition law)</i>	Yes	No
Competition authority established	Yes	Yes	No	Yes	No	NA
Active status	Ongoing efforts	No information	NA	No information	NA	NA

RECOMMENDATIONS

- **#5: SMP regulation should be fully enforced in all Countries, with the regular publication of decisions in relation to market analysis and to Reference Interconnect and Access offers for SMP operators.**
 - *In particular, wholesale markets for national and international capacities will likely need to be analyzed and declared relevant where necessary, due to the persistent absence of competition and high prices in particular for national capacities*
 - *An annual review of dominant operators in each relevant market. This should also include state-owned entities (such as GUILAB, SOGEB, SALCAB and others) that operate critical national resources such as domestic backbones or landing stations*
 - *A set of proportionate remedies for operators declared dominant, including the effective publication of a reference offer for domestic and international capacities (up at least to 10 Gbps) detailing the technical and financial conditions for accessing these capacities, and imposing cost oriented prices*
- **#6:** (i) adopt recommendations on relevant markets for the electronic communications sector and (ii) improve regional SMP regulation with:
 - An identification of a minimal set of relevant markets (including national and international capacities)
 - The exclusion of retail markets from relevant markets (unless the NRA proves that there are urgent and conservatory remedies necessary to such retail markets)
 - The imposition of price-caps for national and international capacities (or at least simple and predetermined methodologies to calculate price-caps)
- **#7: Ensure that competition authorities / NRA's are duly established and have effective investigation and sanction powers regarding anti-competitive practices**
- **#8:** Adoption of guidelines on the application of regional competition law to the electronic communications sector (when there is a regional dimension) by ECOWAS Regional Competition Authority



4. RIGHTS OF WAYS, PUBLIC WORK AUTHORIZATIONS, DIG ONCE POLICY AND PROMOTION OF INFRASTRUCTURE SHARING

IMPLEMENTATION OF AN ONLINE ONE-STOP SHOP

Issue:

- Administrative burden:
 - Rights of way / authorization from the owner of the lands and buildings
 - Public works-related authorizations (numerous types of permits and authorizations to be obtained, including permits in relation to road works, building permits, environmental authorizations, *etc.*)
- Securing such authorizations is difficult and costly:
 - **Difficulty to identify (i) rightful owners** of the lands / buildings and (ii) **competent authorities**
 - **Cumbersome rules and procedures** for obtaining access rights to lands / buildings and public work authorizations
 - **Significant fees** to be paid to obtain and maintain rights / authorizations

Online one-stop shop:

- Opportunity: public authorities could **collect relevant data and information on existing and planned infrastructures**
- Expected outcome: public authorities could rely on such information to:
 - **Coordinate more efficiently the public works needed by all companies** (*i.e.* effective implementation of “dig once only” policy for the deployment of ducts)
 - Ensure that **alternative infrastructures are prepared for digital equipment** (*e.g.* fiber optic cable, ducts, towers, *etc.*)
 - **Implement sharing of infrastructure** by sharing information in relation to existing and future infrastructures to be constructed (*i.e.* operators will be able to request access to such infrastructures or the roll-out of fiber optic at the time the infrastructure is being constructed)

RECOMMENDATIONS

- **#9: Establish an on-line one-stop-shop for right of ways and other authorizations (e.g. public work authorizations, environmental approvals, road permits, etc.) in order to facilitate:**
 - Investments in broadband infrastructures (through more transparent, easy and straightforward procedures for obtaining authorizations)
 - The sharing of infrastructures (between operators and in relation to alternative infrastructures)
 - The financing and construction of infrastructures by multiple cooperating parties (for instance, through co-investment / PPP)
- **#10: Systematize the roll-out of fiber optic cables as part of all future infrastructure developments and public works (“dig once policies”).**
- **#11: Identify all broadband infrastructures in a database (with regular updates), grant access to this database to all ECOWAS electronic communications operators and provide for *ex ante* tariff regulation to access such infrastructures.**

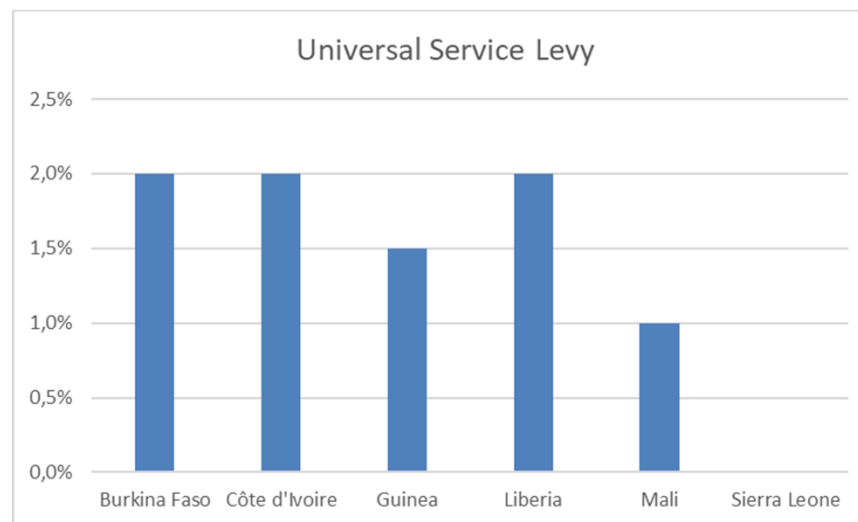


5. UNIVERSAL SERVICE

5 OF THE 6 COUNTRIES HAVE ESTABLISHED A LEVY FOR UNIVERSAL SERVICE, BUT ONLY IVORY COAST HAS FULLY IMPLEMENTED THE FUNDING OF PROJECTS

Enforcement and funding

- Only Ivory Coast has fully implemented the use of funds from Universal Service fund, and has already financed large projects (National Backbone, e-government, access for citizens)
- According to the 2018 Web Foundation report, Ivory Coast had fully spent all USF funds by 2017, while in Burkina Faso, the fund amounted to US\$78 million and had not been used yet, but we understand that there are ongoing efforts to finance projects in 2021



Source: Regulators' websites, Progressus Corporation's research
For Sierra Leone there is a flat fee of US\$ 160.000

Using these data, a theoretical estimation of the annual amount perceived by the fund has been made and leads to a total annual levy of US\$62 million for four countries (Burkina Faso, Ivory Coast, Guinea and Mali). Assuming the same calculation would apply to Liberia and Sierra Leone, this would lead to a grand total of US\$350 million for the six Countries on a 5-years period. Such an amount would allow for considerable investment in regional connectivity, among other projects, which would indeed be an opportunity for all these countries, though the primary use of Universal Service funds is to increase the coverage and usage of underserved areas

CURRENT SITUATION AND RECOMMENDATIONS

PRACTICES	BURKINA FASO	GUINEA	IVORY COAST	LIBERIA	MALI	SIERRA LEONE
Legal and regulatory framework / effective creation of the universal service fund	Yes	Yes	Yes	Yes	Yes	Yes
Content of Universal service	<i>Low cost communication services</i>	<i>Basic telephone service and minimum access to Internet</i>	<i>Low cost communication services</i>	<i>No definition</i>	<i>No definition</i>	<i>Basic telephone service and minimum access to Internet</i>
Active status / existence of funded projects	Yes	No	Yes	Ongoing efforts	No	Ongoing efforts
Existence of play or pay mechanism	No	No	No	Yes	No	No

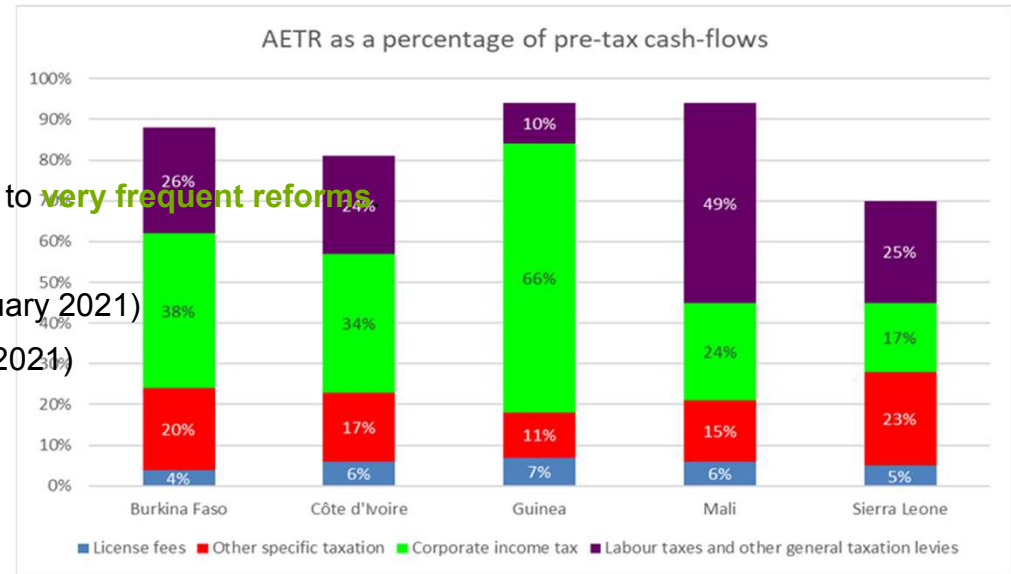
- **#12: Ensure effective use of universal service funds for broadband projects and prohibit use of funds for purposes outside the electronic communications sector**
- **#13: Systematize the “play or pay” mechanism as a fall back measure in case the universal service funds are not used**



6. TAXES

TAXATION PRESSURE IS HIGH IN THE TELECOM SECTOR COMPARED TO OTHER SECTORS

- The level of taxation of the operators significantly varies, from a minimum of 20% of the operator revenue in South Africa to 60% in Guinea (Source: GSMA)
 - Sectoral taxes are subject to **very frequent reforms**.
- Inverse correlation between the level of taxation and the GSMA mobility index
 - Examples:
 - Liberia (order of February 2021)
 - Guinée (order of July 2021)
- Average Effective Tax Rate (AETR) summarizes the main taxes and fees paid by an operator over the length of a telecommunication license .
- The telecom sector faces a much higher level of taxation than the standard level of taxation (85% on average for Burkina Faso, Ivory Coast, Guinea, Mali and Sierra Leone for the telecom sector vs. 31% for the standard taxation rate in other sectors).



CURRENT SITUATION IN THE REGION AND THE COUNTRIES

PRACTICES		BURKINA FASO	GUINEA	IVORY COAST	LIBERIA	MALI	SIERRA LEONE
Taxes are based on electronic communications traffic		NA	Tax on national voice, SMS and data traffic and tax on international voice traffic	Tax on voice traffic	Tax on inbound and outbound international voice traffic Form of taxation of national traffic (through sale on revenues from services provided)	NA	NA
Taxes based on the turnover of electronic communications operators	No neutralization of specific charges / revenues	Neutralization of numerous types of charges	No neutralization / no precision (depending on taxes)	No precision (except for one tax)	No neutralization of interconnection charges	Unclear (exclusion of "interconnection taxes" only)	No neutralization of interconnection charges
	Taxation of revenues from certain activities	Money transfers	NA	Money transfers	NA	NA	NA
Revenues dedicated to sectors or projects outside the electronic communications sector		Financing of sport, culture, ICT and tax administration modernization	NA	Cultural sector	NA	NA	NA

RECOMMENDATIONS

- **#14: Eliminate all remaining taxes on international traffic in order to maintain the capacity of the operators to compete with OTTs**
- **#15: Exclude money transfers from the scope of the taxes applicable to electronic communications**



7. LACK OF ACCESS TO CROSS-BORDER INFRASTRUCTURES AND LACK OF REGIONAL COORDINATION

RIGHT TO ACCESS TO DIGITAL INFRASTRUCTURES IN NEIGHBORING COUNTRIES AND CROSS-BORDER DISPUTES

- No right abroad: operators have no right to obtain access or interconnection with digital infrastructures in neighboring countries
- Except provisions of regional texts:
 - **Regulation C/REG. 19/12/16** (access terrestrial networks operated by SMP operators): requires determination of backbone operators as SMP by NRAs (no application identified)
 - **Regulation C/REG. 06/06/12** (access to submarine cables and landing stations): no information received in relation to its effective implementation (no application identified)
- Improvements:
 - Obligation **imposed on all operators (not only SMP operators)**
 - Extension of digital infrastructures to the border (to a reasonable extent)
 - **Price for cross-border wholesale capacity** determined at regional level (at least for landlocked countries)
- ECOWAS and WAEMU provisions on cross-border disputes (see below):
 - They have been transposed in **Burkina Faso, Guinea, Ivory Coast and Mali**
 - **We have not identified a single cross-border dispute that was solved through such cross-border dispute resolution mechanisms**
- Why:
 - Limited number of Member States have implemented the regional provisions
 - Perceived weakness of NRAs
 - Lack of right to access digital infrastructures in foreign countries

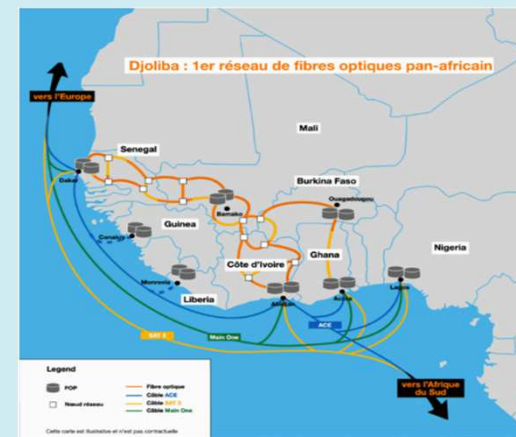
Other existing regional provisions: (i) article 3 paragraph 1 of the ECOWAS Supplementary Act A/SA. 2/01/07 on Access and Interconnection in Respect of ICT Sector Networks and Services, (ii) article 16 of ECOWAS Supplementary Act A/SA. 1/01/07 on the harmonization of Policies and of the Regulatory Framework for ICT sector, (iii) article 28 of ECOWAS Supplementary Act A/SA. 2/01/07 on Access and Interconnection in Respect of ICT Sector Networks and Services and (iv) article 9.2 of WAEMU Directive No. 01/2006/CM/UEMOA on the harmonization of control and regulatory policies for the telecommunications sector

LACK OF COORDINATION IN RELATION TO THE ROLL-OUT OF CROSS-BORDER INFRASTRUCTURES

- Initiatives are at the national level:
 - Each State / operators roll-out their digital infrastructures based on their needs and potential use at a national level (apart some operators with regional footprints)
 - Needs and existing infrastructures at regional level are not taken into account
- No regional coordination is in place:
 - No regional body is in charge of any rationalization / coordination
 - WATRA has no legal power on such matter

Only dominant operators have succeeded to establish regional infrastructure

➤ Example of Orange's Djoliba network



Existing regional provisions: (i) article 10.2 of the ECOWAS Supplementary Act A/SA. 1/01/07 on the harmonization of Policies and of the Regulatory Framework for ICT sector, (ii) article 3 of WAEMU Directive No. 01/2006/CM/UEMOA on the harmonization of control and regulatory policies for the telecommunications sector, (iii) article 3 of the WAEMU Directive No. 02/2006/CM/UEMOA on the harmonization of the regimes applicable to network operators and service providers and (iv) articles 1 and 5 of the WAEMU Directive No. 06/2006/CM/UEMOA organizing the overall framework for cooperation among national telecommunications regulatory authorities

RECOMMENDATIONS

- **#16: Generalize cross-border interconnection and access rights between operators in different ECOWAS Member States even for non-SMP operators (e.g. adjust Regulation C/REG. 19/12/16) and implement this obligation in all electronic communications operators' licenses and technical specifications.**
- #17: Ensure that a regional body is in charge of gathering information on projects in relation to national and regional infrastructures (including alternative infrastructures) and disseminating them to key focal points (both public and private stakeholders) at the national level to ensure transparency and, more concretely, that:
 - Such projects are coordinated and consistent from a regional perspective
 - Fibre-optic is rolled-out on such infrastructures (including through the dissemination of information to all relevant public and private stakeholders)
- #18: Create specific committee in charge of:
 - Monitoring each country's progress in the implementation and compliance of the regional legal and regulatory provisions by member States
 - Reporting publicly the outcome of such monitoring on a regular basis.
- Adjust legal framework (e.g. Regulation C/REG. 19/12/16) to generalize cross-border interconnection and access rights between operators in different ECOWAS Member States even for non-SMP operators



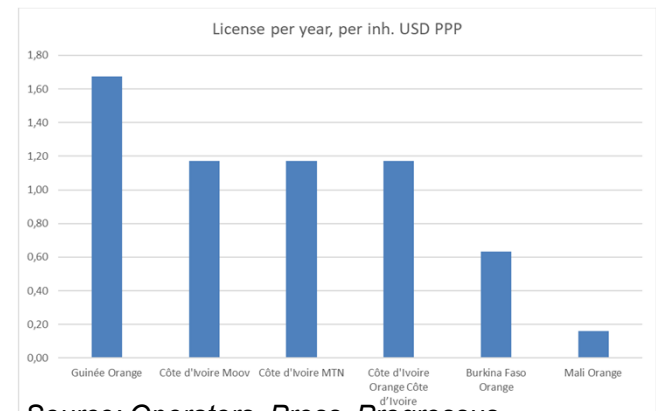
8. SPECTRUM ISSUES

SPECTRUM VALORISATION AND SPECTRUM SHARING ARE AMONG THE MOST IMPORTANT ISSUES IN SPECTRUM MANAGEMENT

Main concerns

- Spectrum scarcity is not an issue. Except for Burkina Faso and Nigeria, less than 60% of the 2G/3G bands have been assigned, and except for Ivory Coast, the Digital Dividend has not been reassigned to telecoms
- The question of optimal spectrum valorization remains open: auctions have had a mixed success and prices of licenses have a very wide range
- License Exempt Spectrum should be developed. Several countries have regulatory restrictions on the use of Wi-Fi to create broadband Point to Point (PtP) or Multi Point (PtMP) links. Good practice should include reducing or removing registration and fee requirements for license exempt PtP and PtMP
- Shared access and local access licenses. In rural areas, IMT spectrum is significantly underutilized. Use it or share it policies can unlock access to spectrum in rural areas in order to enable operators with business models specifically aimed at rural service

Percent assigned	2G/3G	Digital Dividend
Burkina Faso	76%	0%
Côte d'Ivoire	71%	40%
Guinea	16%	0%
Liberia	54%	0%
Mali	59%	0%
Sierra Leone	19%	0%



Source: Operators, Press, Progressus Corporation's research

RECOMMENDATIONS

Recommendations

- **#19:** Increase the amount of spectrum assignment to broadband operators in particular for the DD1 / DD2 bands, with reasonable reserve pricing when auctions are used.
- **#20:** Develop the usage of unlicensed spectrum through registration and fee waivers.
- **#21:** Introduce dynamic spectrum management and spectrum sharing rules (use it or share-it) to promote investment in uncovered areas.



DATA PROTECTION

INCOMPLETENESS OF LEGAL AND REGULATORY FRAMEWORKS (OR IMPLEMENTATION THEREOF)

- **African Union Convention on Cyber Security and Personal Data Protection** (27 June 2014)
 - Not yet applicable since it needs to be ratified by at least 15 States (and has only been ratified by 9 countries as of 1 July 2021)
 - It has not been signed by Burkina Faso, Ivory Coast, Liberia and Mali (and has been signed but not ratified by Sierra Leone). It has been ratified by Guinea (Burkina Faso is planning on signing / ratifying the convention)
- **ECOWAS Supplementary Act No. A/SA. 1/01/10 on Personal Data Protection** (16 February 2010): not directly applicable in ECOWAS Member States
- **National level:**
 - 4 out of the 6 Countries have a legal framework (Burkina Faso, Guinea, Ivory Coast and Mali)
 - Regulatory frameworks have not yet started to be adopted, regulatory authority are not in place or are not active

DATA PROTECTION : SITUATION IN THE REGION AND IN THE COUNTRIES

TOPICS	BURKINA FASO	GUINEA	IVORY COAST	LIBERIA	MALI	SIERRA LEONE
Policy / strategy	Yes	No	No	No	No	No
Legal frameworks	Yes	Yes	Yes	No	Yes	No
Regulatory frameworks	Yes	No	Yes	NA	Ongoing	NA
Implementation of the legal and regulatory frameworks	Yes	No information	Yes	NA	Yes	NA
Existence of data protection authority	CIL	No	ARTCI	No	APDP	No
Active status of data protection authority	Yes	NA	Yes	NA	Yes	NA
Global assessment	+++	--	+++	---	++	---

RECOMMENDATIONS

- Need to bridge the gap (adopting and implementing legal and regulatory frameworks):
 - International investors request **legal certainty** in relation to data protection
 - Some **national projects** (e.g. e-identity, e-health, e-administration in general *etc.*) may only be implemented once there is a national legal and regulatory framework
- Regional rules needed:
 - **Complexity of fragmented legal and regulatory frameworks** at the national level
 - **Economies of scale** may only be attained through regional projects
 - **Regional data protection authority** could be contemplated
- Rules should: **efficiently protect citizens' personal data** and remain **easy to understand**, implement and comply with



DIGITAL ACTIVITIES

PRESENTATION OF THE LEGAL FRAMEWORKS APPLICABLE TO DIGITAL ACTIVITIES

- **Consumer protection:** build users' confidence in digital activities
- **Electronic transactions:** provisions governing key digital tools / issues (cornerstone of all digital activities)
- **Electronic administration and public information:** freedom of information, right to access public information, data and documents and relationship between citizens and the administration
- **Electronic identification:** key issue to fully implement various types of e-administration projects (e.g. e-identity, e-health, etc.)
- **Digital financial services:** enable consumers and companies to fully benefit from digital activities (used digital services in West Africa)
- **Cybercriminality and cybersecurity:** key to maintain consumers trust in digital activities and enable States to sanction online infractions

CURRENT SITUATION IN THE REGION

- Regional framework:
 - See above for African Union Convention on Cyber Security and Personal Data
 - ECOWAS Directive on Cybercrime (19 August 2011): only set objectives to be attained in the Countries (each Country may freely adopt national measures to transpose such Directive)
- National frameworks: **not adopted, not implemented, no relevant authority or authority not operational**
- Focus on digital financial services:
 - Texts from the Central Bank of Africa are applicable in Burkina Faso, Ivory Coast and Mali (additional national texts are applicable in Burkina Faso)
 - In Liberia and Guinea, national texts are applicable (none in Sierra Leone)

EXISTENCE OF STRATEGIES AND POLICIES IN 3 KEY TOPICS

TOPICS	BURKINA FASO	GUINEA	IVORY COAST	LIBERIA	MALI	SIERRA LEONE
Electronic transactions	Yes	No	Yes	Yes	Yes	No
Electronic administration and public information	Yes	Yes	Yes	Unclear	No	Partially
Cybercriminality and cybersecurity	Yes	No	Yes	No	No	Unclear
Global assessment	+++	--	+++	-	--	--

CONSUMER PROTECTION

CONSUMER PROTECTION	BURKINA FASO	GUINEA	IVORY COAST	LIBERIA	MALI	SIERRA LEONE
Legal framework	Yes	Yes	Yes	Yes	Yes	Yes
Implementation of the legal framework	No information	No information	No information	No information	No information	No information
Existence of a consumer protection authority	CNCC	No	CNC, CCA and CNLVC	No	DGCC	NCPC
Active status of the consumer protection authority	No information	NA	No information	NA	No information	No information
Global assessment	++	-	++	-	++	++

ELECTRONIC TRANSACTIONS

ELECTRONIC TRANSACTIONS	BURKINA FASO	GUINEA	IVORY COAST	LIBERIA	MALI	SIERRA LEONE
Legal frameworks	Yes	Yes	Yes	Yes	Yes	Yes
Regulatory frameworks	No	Yes	Yes	No	Yes	No
Legal or regulatory frameworks on domain names	Yes	Yes	Yes	Yes	No	No
Implementation of the legal and regulatory framework	No information	No information	No information	No information	No information	No information
Existence of a authority in charge of electronic transactions	ARCEP and ANSSI	ANSSI	ARTCI	No	No	No
Active status of the authority	Yes	No information	Yes	NA	NA	NA
Global assessment	++	+	+++	-	-	--

ELECTRONIC ADMINISTRATION

ELECTRONIC ADMINISTRATION AND PUBLIC INFORMATION	BURKINA FASO	GUINEA	IVORY COAST	LIBERIA	MALI	SIERRA LEONE
Legal frameworks	Yes	Ongoing	Yes	Yes	Yes	Yes
Regulatory frameworks	Yes	No	Yes	No	Yes	No
Implementation of the legal and regulatory frameworks	No	No	Partially	No information	Partially	No information
Global assessment	+	-	++	+	++	+

ELECTRONIC IDENTIFICATION RELATED FRAMEWORK

ELECTRONIC IDENTIFICATION	BURKINA FASO	GUINEA	IVORY COAST	LIBERIA	MALI	SIERRA LEONE
Legal or regulatory frameworks	No	No	Yes	Yes	No	Yes
Implementation of the legal and regulatory framework	NA	NA	Yes	No information	NA	No information
Existence of a dedicated agency or authority	No	No	ONECI	No	No	NCRA
Active status of the dedicated agency or authority	NA	NA	Yes	NA	NA	No information
Global assessment	---	---	+++	+	---	++

DIGITAL FINANCIAL SERVICES

DIGITAL FINANCIAL SERVICES	BURKINA FASO	GUINEA	IVORY COAST	LIBERIA	MALI	SIERRA LEONE
Regional (WAEMU) and / or national legal and regulatory frameworks	Yes (<i>regional and national provisions</i>)	Yes (<i>national provisions only</i>)	Yes (<i>regional provisions only</i>)	Yes (<i>national provisions only</i>)	Yes (<i>regional provisions only</i>)	No
Relevant regional (WAEMU) or national public authority	Central Bank of West Africa	Central Bank of Guinea	Central Bank of West Africa	Central bank of Liberia	Central Bank of West Africa	No
Global assessment	+++	+++	+++	+++	+++	---

CYBERSECURITY AND CYBERCRIMINALITY

CYBERCRIMINALITY AND CYBERSECURITY	BURKINA FASO	GUINEA	IVORY COAST	LIBERIA	MALI	SIERRA LEONE
Legal frameworks on cybercriminality and cybersecurity	Ongoing	Yes	Yes	Partially	Yes	Yes
Implementation of legal and regulatory frameworks	No information	No information	Yes	No information	No information	No information
Existence of a dedicated agency or authority	ANSSI	ANSSI	CI-CERT	Unclear	No	Unclear
Active status of the dedicated agency or authority	Ongoing efforts	No information	Yes	No	NA	No
Global assessment	+	++	+++	--	-	-

RECOMMENDATIONS

- Regional framework: for electronic transactions (see OHADA initiative), cybersecurity, some specific consumer protection rules and possibly a basic set of rules governing electronic identification
- Regional authority (at least for electronic transactions): consistent with regional-dimension of the market for investors and the expertise needed
- More specific measures (examples):
 - **E-commerce**: improvement of issues in relation to postal addresses (e.g. national platforms of geolocalization or to provide localization)
 - **Digital services**: (i) interoperability of all types of digital financial services nationally / regionally and (ii) ensuring that all public administrations accept digital payments (e.g. for taxes, fees, fines, etc.)
 - **Digitalizing administrative formalities** (e.g. obtaining visas, passports, birth / death / wedding certificates, identity cards, criminal records, work and building permits, etc.)



LEGISLATIVE APPROACH

SOME RULES SHOULD BE ADOPTED AT THE REGIONAL LEVEL

Market components	Regional level	National level
Connectivity	<ul style="list-style-type: none"> ➤ Regional framework directly applicable and enforceable in all countries for core principles (e.g. prohibition of monopoly / exclusive rights, licensing regimes, SMP regulation, infrastructure sharing, etc.) ➤ Regional framework harmonizing national rules for other matters 	National rules implementing harmonized regional framework
Data	<ul style="list-style-type: none"> ➤ Regional framework directly applicable and enforceable in all countries ➤ Possibly a single regional regulatory authority 	Ability for Member States to adopt national rules for some specific issues or to impose more stringent obligations
Online activities	<ul style="list-style-type: none"> ➤ Regional framework directly applicable and enforceable in all Member States for some matters (consumer protection, electronic transactions, electronic identification, digital financial services, cybersecurity, etc.) ➤ Regional framework harmonizing national rules for other matters 	National rules implementing harmonized regional framework / adopting national rules when there is no regional harmonization (e.g. electronic administration and public information, cybercriminality)

QUESTIONS?



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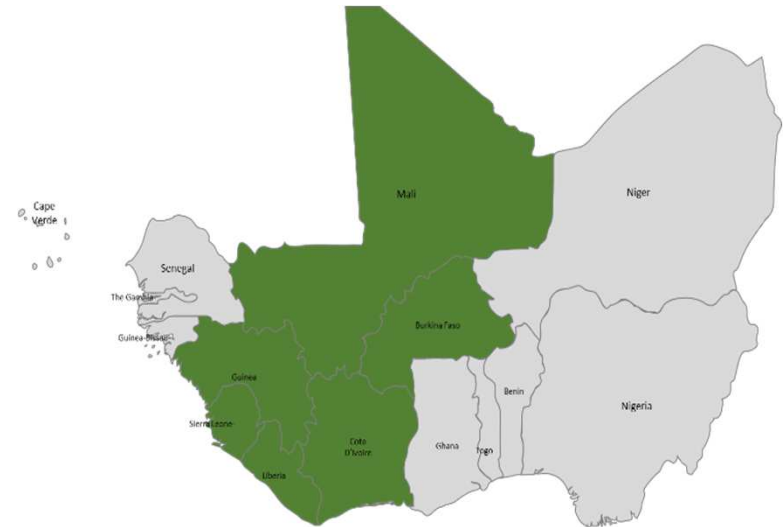
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BACK UP

REPRESENTATIVE COUNTRIES

- **Selection of West-African countries:**
 - A country with a more advanced digital infrastructure, relatively well connected by submarine fiber and national backbone (**Ivory Coast**)
 - Landlocked countries facing the challenge of sparse low-income populations and long-distance to link with international fiber (**Burkina Faso** and **Mali**)
 - Coastal countries with limited access to international submarine fiber and low development of national backbones (**Guinea**, **Liberia** and **Sierra Leone**)



ISSUES ARE FOUND AT THE REGIONAL AND NATIONAL LEVEL

Issues	Regional level	National level			
	<u>Lack of / incomplete / deficient provisions</u> of the regional legal framework	<u>Implementation</u> of regional framework (<i>lack of</i>)	<u>Transposition</u> of regional framework (<i>lack of / incomplete / deficient</i>)	<u>Non-compliance</u> with regional / national provisions	<u>Implementation</u> of regional / national provisions (<i>lack of</i>)
Exclusive rights					
Authorization and licensing					
SMP / competition law	<i>(competition law)</i>	<i>(competition law)</i>			
Rights of ways, public work authorizations, infrastructure sharing					
Universal services					
Taxes					
Regional coordination / cross-border rules					
Spectrum					

RELEVANT SOURCES OF FINANCING FOR THE CONSTRUCTION OF DIGITAL INFRASTRUCTURES

SOURCE OF FINANCING	SITUATIONS	MODELS	EXAMPLES
Private	Private sector is willing to invest / commercial loans may be obtained to finance such investments	Private sector finance, construct and operate infrastructures	Mobile markets (except in limited non-profitable areas)
Private but organized by public authorities	Funds are collected from private sector to invest, but private sector would not invest without incentive / obligation imposed by public authorities (e.g. funds from universal service)	Private sector finance the investments through specific contributions but public authorities decide where (non-profitable areas), how (type of infrastructures) and by whom (which operator) investments will be made Play or pay mechanisms may grant more flexibility to operators to invest themselves in non-profitable areas	Backbones, submarine cables and related landing facilities and mobile infrastructures in non-profitable areas
Public and private	Private sector is willing to invest but needs support from public authorities (including through funds made available by international contributors such as IDA, BAD, etc.)	Acquisition of equity by public authorities to finance future investments Loan granted to private sector to construct and operate infrastructures Construction of infrastructure financed by public funds and which is then operated through a concession-type agreement	Backbones, submarine cables ¹⁰² and related landing facilities
Public	Private sector is not willing to invest	Public authorities construct / finance infrastructures	No specific example apart from backbones financed by Eximbank and constructed by Huawei

COMMERCIALIZATION OF FIBER OPTIC BY OWNERS / MANAGERS OF ALTERNATIVE INFRASTRUCTURES: LEGAL REGIMES

- Current legal regimes:

LEGAL REGIMES	BURKINA FASO	GUINEA	IVORY COAST	LIBERIA	MALI	SIERRA LEONE
License	License ¹⁰⁴		License (for provision of capacities) ¹⁰⁵		License (no specific provision) ¹⁰⁶	
Infrastructure license		Infrastructure license (unclear provision for IRU) ¹⁰⁷		(Infrastructure) License (unclear) ¹⁰⁸		Infrastructure license ¹⁰⁹
Authorization			Authorization (for IRU) ¹¹⁰			

- Potential legal regimes:

LEGAL REGIMES	RIGHT TO ROLL-OUT	PROVIDE ACCESS TO PASSIVE INFRASTRUCTURES	RIGHT TO USE INTERNALLY	RIGHT TO MAKE IRU AVAILABLE	RIGHT TO LEASE (CAPACITY)	
					WHOLESALE MARKET	RETAIL MARKET
License						
Authorization						
Declaration						
Liberty						

CASE STUDY: INNOVATIVE TECHNOLOGIES

New options for addressing regional connectivity in rural areas

- Low earth orbit (LEO) satellites are increasingly capable of providing much more affordable connectivity and interconnection services
 - Yahsat and other High Throughput Satellite (HTS) operators are already providing coverage across the region
 - However, not all of the Countries have permitted low cost satellite broadband services like Yahclick – only Ivory Coast
- TV White Space (TVWS) licensing frameworks, which are in the process of being adopted in Nigeria, and Ghana. The opening up of this spectrum will offer new opportunities to provide the long distance non-line-of-sight links that are often needed in remote and sparsely populated rural areas in developing countries
- Regional approach to the implementation of a geo-location database is a practical response given that other countries in the region will face the same challenge with geo-location databases as they implement TVWS regulation



IMPACT OF THE ISSUES IDENTIFIED ON THE MARKETS

SUJETS	OBSTACLES	IMPACT
Monopolies / exclusive rights		
Licensing regimes	Cumbersome procedures for obtaining licenses for certain activities	
	Foreign operators do not have a right to obtain a license for certain activities	
Regulation of SMP and Competition Law	No (or limited) SMP regulation	
	Lack of Competition Law for Access to Infrastructures	
Sharing of Telecommunications Infrastructures and Alternative Infrastructures	Obtaining rights to use public / private lands / buildings	
	No promotion / organization of sharing of infrastructures / access to alternative infrastructures	
Universal Service (unused funds)		
Taxes (impact on consumer cost and usage)		
No regional coordination	Lack of Interconnection and Access Rights in Relation to Electronic Communications Infrastructures Located in Neighbouring Countries	
	Lack of Use of Existing Cross-Border Dispute Resolution Mechanisms	
	Lack of Coordination in Relation to the Roll-Out of Cross-Border Infrastructures	
	Failure to Coordinate Projects Between Countries	
Spectrum	High cost of spectrum, lack of availability of needed wavebands	

To be translated

SOURCE OF ISSUES

SUJETS	OBSTACLES	DÉFICIENCE DU CADRE JURIDIQUE	DIFFICULTÉS DE MISE EN ŒUVRE DU CADRE JURIDIQUE	DIFFICULTÉS POLITIQUES
Monopolies / exclusive rights				
Licensing regimes	Cumbersome procedures for obtaining licenses for certain activities			
	Foreign operators do not have a right to obtain a license for certain activities			
Regulation of SMP and Competition Law	No (or limited) SMP regulation			
	Lack of Competition Law for Access to Infrastructures			
Sharing of Telecommunications Infrastructures and Alternative Infrastructures	Obtaining rights to use public / private lands / buildings			
	No promotion / organization of sharing of infrastructures / access to alternative infrastructures			
Universal Service (unused finds)				
Taxes (impact on consumer cost and usage)				
No regional coordination	Lack of Interconnection and Access Rights in Relation to Electronic Communications Infrastructures Located in Neighbouring Countries			
	Lack of Use of Existing Cross-Border Dispute Resolution Mechanisms			
	Lack of Coordination in Relation to the Roll-Out of Cross-Border Infrastructures			
	Failure to Coordinate Projects Between Countries			
Spectrum	High cost of spectrum, lack of availability of needed wavebands			

COMMERCIALIZATION OF FIBER OPTIC BY OWNERS / MANAGERS OF ALTERNATIVE INFRASTRUCTURES: POSSIBLE MODELS

MODELS		MOST COMMON LEGAL REGIME	IMPACT
Transfer of ownership of fibre optic		NA	Deter roll-out of fibre optic by owners / managers of alternative infrastructures (unless an obligation to roll-out such fibre optic is imposed)
Make passive infrastructures (ducts, rights of ways, electrical towers, <i>etc.</i>) available		NA	Prevent owners / managers of alternative infrastructures to reap the benefits from their investments, although this model is adapted when owners do not want to roll-out themselves the fibre optic (<i>e.g.</i> existing electricity distribution company or existing roads)
Make fibre optic (IRU) available to <u>one</u> operator in charge of it commercialization		Authorization / license	Prevent owners / managers of alternative infrastructures to reap the benefits from their investments
Make fibre optic (IRU) available to any operator		Authorization / license	Markets for IRU is limited (but electronic communications operators would usually prefer to access to IRU than capacity)
Lease of capacity	Wholesale market (operators only)	License	Markets for capacities is more extended than IRU only
	Retail market (including end-users)		Full access to whole market

PROPOSED REFORMS

REFORM AGENDA 1. EXCLUSIVE RIGHTS AND AUTHORIZATIONS/LICENSING

Reform Agenda	Proposed Reforms	
	Level	Medium term (3-5 years)
Reform Agenda 1. Exclusive rights & Authorizations / Licensing	Specific regional level measure	
	ECOWAS Commission	Reform #1.7: Adjust legal framework to create a specific legal regime and procedure (e.g. authorization / declaration at the regional level) for (i) national operators for activities in relation to broadband infrastructures when no scarce resources are involved (e.g. provision of IRU, dark fiber or national or international capacities) and (ii) foreign operators of regional broadband infrastructures
	Specific national level measures	
	Burkina Faso	Reform #1.1: For broadband infrastructures, adoption of a clear political stance on the grant of new licenses / authorizations and conditions to obtain them (objective, transparent and non-discriminatory) Reform #1.8: Adjust legal frameworks to provide for authorization / declaration for activities in relation to broadband infrastructures (when no scarce resources are involved)
	Guinea	Reform #1.2: For broadband infrastructures, adoption of a clear political stance on the grant of new licenses / authorizations and conditions to obtain them (objective, transparent and non-discriminatory) > Reform #1.9: Adjust legal frameworks to provide for authorization / declaration for activities in relation to broadband infrastructures (when no scarce resources are involved) > Reform #1.10: Grant at least one license / authorization (or accept declaration) for the construction and operation of a broadband infrastructure to a non-State-owned company
	Ivory Coast	Reform #1.3: For broadband infrastructures, adoption of a clear political stance on the grant of new licenses / authorizations and conditions to obtain them (objective, transparent and non-discriminatory) Reform #1.11: Adjust legal frameworks to provide for authorization / declaration for activities in relation to broadband infrastructures (when no scarce resources are involved)
	Liberia	Reform #1.4: For broadband infrastructures, adoption of a clear political stance on the grant of new licenses / authorizations and conditions to obtain them (objective, transparent and non-discriminatory) > Reform #1.12: Adjust legal frameworks to provide for authorization / declaration for activities in relation to broadband infrastructures (when no scarce resources are involved) > Reform 1.13: Grant at least one license / authorization (or accept declaration) for the construction and operation of a broadband infrastructure to a non-State-owned company
	Mali	Reform #1.5: For broadband infrastructures, adoption of a clear political stance on the grant of new licenses / authorizations and conditions to obtain them (objective, transparent and non-discriminatory) Reform #1.14: Adjust legal frameworks to provide for authorization / declaration for activities in relation to broadband infrastructures (when no scarce resources are involved)
	Sierra Leone	Reform #1.6: For broadband infrastructures, adoption of a clear political stance on the grant of new licenses / authorizations and conditions to obtain them (objective, transparent and non-discriminatory) > Reform #1.15: Adjust legal frameworks to provide for authorization / declaration for activities in relation to broadband infrastructures (when no scarce resources are involved) > Reform #1.16: Grant at least one license / authorization (or accept declaration) for the construction and operation of a broadband infrastructure to a non-State-owned company

PROPOSED REFORMS

REFORM AGENDA 2. EX ANTE / EX POST REGULATION

Reform Agenda	Proposed Reforms		
	Level	Short term (2-3 years)	Medium term (3-5 years)
Reform Agenda 2. Ex ante / ex post regulation	Specific regional level measure		
	ECOWAS Commission	<ul style="list-style-type: none"> ➤ Reform #2.1: Adopt recommendations on relevant markets for the electronic communications sector ➤ Reform #2.2: ECOWAS Regional Competition Authority to adopt guidelines on the application of regional competition law framework (when there is a regional dimension) to the electronic communications sector 	Reform #2.7: Improve SMP regulation with (i) a minimal set of relevant markets (including national and international capacities), (ii) the exclusion of retail markets from relevant markets (unless the NRA proves that there are urgent and conservatory remedies necessary to such retail markets) and (iii) the imposition of price-caps for national and international capacities (or at least simple and predetermined methodologies to calculate price-caps)
	Specific national level measures		
	Burkina Faso		
	Guinea	Reform #2.3: Enforce SMP regulation with the regular publication of decisions in relation to market analysis and to Reference Interconnect and Access offers for dominant operators	
	Ivory Coast		Reform #2.8: Ensure competition authorities / NRAs are established and have effective investigation and sanction power regarding anti-competitive practices in the electronic communications sector
	Liberia	Reform #2.4: Enforce SMP regulation with the regular publication of decisions in relation to market analysis and to Reference Interconnect and Access offers for dominant operators	
	Mali	Reform #2.5: Enforce SMP regulation with the regular publication of decisions in relation to market analysis and to Reference Interconnect and Access offers for dominant operators	Reform #2.9: Ensure competition authorities / NRAs are established and have effective investigation and sanction power regarding anti-competitive practices in the electronic communications sector
	Sierra Leone	Reform #2.6: Enforce SMP regulation with the regular publication of decisions in relation to market analysis and to Reference Interconnect and Access offers for dominant operators	Reform #2.10: Ensure competition authorities / NRAs are established and have effective investigation and sanction power regarding anti-competitive practices in the electronic communications sector

PROPOSED REFORMS

REFORM AGENDA 3. INFRASTRUCTURE SHARING AND RIGHT OF WAYS

Reform Agenda	Proposed Reforms		
	Level	Short term (2-3 years)	Medium term (3-5 years)
Reform Agenda 3. Infrastructure sharing and rights of ways	Specific regional level measure		
	ECOWAS Commission		
	Specific national level measures		
	Burkina Faso	<p>Reforms #3.1 to #3.12:</p> <ul style="list-style-type: none"> ➤ Systematize the roll-out of fibre optic as part of all future infrastructure developments (including alternative infrastructures) and public works (“<i>dig once policies</i>”) ➤ Identify all broadband infrastructures in a database (with regular updates), grant access to this database to all ECOWAS electronic communications operators and provide for ex ante tariff regulation to access such infrastructures 	<p>Reforms #3.13 to #3.18: Establish an on-line one-stop-shop for right of ways and other authorizations (<i>e.g.</i> public work authorizations, environmental approvals, road permits, <i>etc.</i>) in order to facilitate (i) investments in broadband infrastructures (through more transparent, easy and straightforward procedures for obtaining authorizations), (ii) the sharing of infrastructures (between operators and in relation to alternative infrastructures) and (iii) the financing and construction of infrastructures by multiple cooperating parties (for instance, through co-investment / PPP)</p>
	Guinea		
	Ivory Coast		
	Liberia		
Mali			
Sierra Leone			

PROPOSED REFORMS

REFORM AGENDA 4. UNIVERSAL SERVICE

Reform Agenda	Proposed Reforms		
	Level	Short term (2-3 years)	Medium term (3-5 years)
Reform Agenda 4. Universal Service	Specific regional level measure		
	ECOWAS Commission		
	Specific national level measures		
	Burkina Faso	Reform #4.1: Ensure yearly publication of an activity report for universal service projects and financial accounts	Reform #4.5: Finance at least one national broadband infrastructure (e.g. backbone) with universal service funds
	Guinea		Reform #4.6: Finance at least one national broadband infrastructure (e.g. backbone) with universal service funds
	Ivory Coast	Reform #4.2: Ensure yearly publication of an activity report for universal service projects and financial accounts	
	Liberia	Reform #4.3: Ensure yearly publication of an activity report for universal service projects and financial accounts	Reform #4.7: Finance at least one national broadband infrastructure (e.g. backbone) with universal service funds
	Mali		Reform #4.8: Finance at least one national broadband infrastructure (e.g. backbone) with universal service funds
	Sierra Leone	Reform #4.4: Ensure yearly publication of an activity report for universal service projects and financial accounts	Reform #4.9: Finance at least one national broadband infrastructure (e.g. backbone) with universal service funds

PROPOSED REFORMS

REFORM AGENDA 5. REGIONAL COORDINATION

Reform Agenda	Proposed Reforms	
	Level	Medium term (3-5 years)
Reform Agenda 5. Regional Coordination	Specific regional level measure	
	ECOWAS Commission	<p>➤ Reform #5.1: Ensure that a regional body is in charge of gathering information on projects in relation to national and regional infrastructures (including alternative infrastructures) and disseminating them to key focal points (both public and private stakeholders) at the national level to ensure transparency and, more concretely, that (i) they are coordinated and consistent from a regional perspective and (ii) that fibre-optic is rolled-out on such infrastructures (including through the dissemination of information to all relevant public and private stakeholders)</p> <p>➤ Reform #5.2: Create specific committee in charge of (i) monitoring each country's progress in the implementation and compliance of the regional legal and regulatory provisions by member States and (ii) reporting publicly the outcome of such monitoring on a regular basis</p>
	Specific national level measures	
	Burkina Faso	
	Guinea	
	Ivory Coast	
	Liberia	
	Mali	
Sierra Leone		