TELECOMMUNICATIONS GOVERNANCE IN POST-CONFLICT DEVELOPING COUNTRIES – THE CASE OF THE AFRICA COAST TO EUROPE (ACE) CABLE SYSTEM IN LIBERIA

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Abstract: This paper presents an analysis of Liberia's membership to date in the Africa Coast to Europe (ACE) submarine cable consortium and its initial governance structures, challenges and successes. A connection to the ACE cable will offer Liberia its first terrestrial international Internet gateway and is seen as a path to increasing ICT access and use in that country. This study employs a four-point framework, including critical factors that can influence the overall good governance of the cable system. The analysis points to ways in which Liberia's institutional and policy arrangements for ACE may—or may not—lead to the benefits that have been ascribed to the country's membership in the consortium. The study reveals several challenges: a history of strained relationships between key stakeholders, a perception in the industry of a weak telecoms regulator, and inadequate technical and human resources in the sector. Important positive elements are also present including broad public and political support for the ACE project, and significant technical support from international development partners.

Keywords: Submarine cable, ACE, Liberia, telecommunications governance, public-private partnership, post-conflict.

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1. INTRODUCTION - ACE IN LIBERIA

Liberia is classified as a Least Developed Country (LDC) by the United Nations; this is indicative of a very low-income population, poor social and health indicators and a high degree of economic vulnerability.[1] In 2011 the per capita gross national income was $240 one of the lowest income levels in the world (The World Bank, 2011). The current state of affairs follows prolonged internal conflict between 1980 and 2003. The civil war destroyed most of the country's educational, health, economic and telecommunications infrastructure.

Since the return to democratic rule, one of the government's priorities is to promote the use of information and communication technology (ICT) to address its various development challenges. However, given the legacy of the civil war and the state of the economy, ICT adoption has generally been limited. For example, while mobile diffusion in 2010 (mobile subscriptions per 100 persons) was 39.34[2], use of the Internet (at home or in other venues) was estimated at seven percent of the population in 2010 (World Bank/ITU, 2012). As of mid-2012, international connectivity was achieved via relatively expensive satellite technologies.

The civil war and the subsequent focus on immediate needs and national reconciliation conspired to prevent Liberia from capitalizing on a number of cheaper international connectivity options, such as submarine fiber-optic cables that have already been laid along the West African Coast including the South Atlantic 3/West Africa Submarine Cable and the Main One cable. The lost opportunity costs of not being able to take advantage of these options have been high for Liberia. Satellite connectivity expenses have been estimated at approximately $3,000 monthly per Mbps in Liberia. Meanwhile, access via submarine cables is approximately $280–800 monthly per Mbps with Main One and SAT-3 for Liberia's neighbors such as Senegal and Côte d'Ivoire (World Bank, 2010).

In 2010 France Télécom-Orange initiated the Africa Coast to Europe (ACE) submarine communications cable project to run from France to South Africa, adding yet one more submarine cable along the West African coast. The ACE submarine communications project consists of a 17,000 km-long fiber-optic cable system that will run from France to South Africa. The project is financed with an investment of approximately $700 million and administered by a consortium. The consortium currently consists of sixteen entities, including France Télécom along with many of the national telecom operators from the African countries that lie along the Atlantic Ocean.[3] In all, the cable network will include connections to eighteen African countries, with a potential capacity of 5.1 Tbits.[4]

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[1] http://www.unohrlls.org/en/ldc/164/, The United Nations Office of the High Representative for the Least Developed Countries, Landlocked Developing Countries and Small Island Developing States (Accessed May 12, 2012)

[2] http://www.itu.int/ITU-D/ict/statistics , International Telecommunications Union (Accessed May 31, 2012)

[3] For the complete list of all sixteen ACE consortium members see: http://www.ace-submarinecable.com/ace/default/EN/all/ace_en/the_consortium.htm (accessed June 2, 2012).

[4] http://www.ace-submarinecable.com/ace/default/EN/all/ace_en/the_project.htm, overview of the ACE cable initiative (accessed June 2, 2012).

In an attempt to secure membership in the ACE consortium, an agreement was reached between the Liberian government, Libtelco and two private-sector mobile phone operators to create a public-private partnership (PPP). With this commitment in place, the World Bank supported the government's contribution to the cost of membership in the ACE consortium, along with some administrative and capacity building support, through a loan of $25.6 million (World Bank, 2010). This loan is part of a larger initiative, the West African Regional Communication Infrastructure Program (WARCIP), the first phase of which applies to Liberia and Sierra Leone.

The ACE cable connection landed in Liberia in late 2011 to much publicity in the local and international media.[5] The connection is expected to go online in 2013. Several observers have outlined the numerous ways in which Liberia will benefit. For example, it will help spur growth in the national ICT sector, improve the country's e-government capacity; provide cheaper and faster Internet services; potentially allow for local management of Liberia's county code top-level domain (its ".lr" domain); and increase the impact of ICT on the health, education, and national security sectors in the country (Victor, n.d.). Also of note is the long-term impact that improved access and use of ICTs might have on the innovation potential of the Liberian economy.

While popular attention has focused on the benefits that can accrue to Liberians from connecting to the ACE cable system, the public and mass media have focused less on understanding how Liberia will manage and govern the system. The focus of this paper is on the early governance of the ACE connection in Liberia. Specifically, we are concerned with understanding the institutional and organizational configuration of the governance of the ACE system in Liberia and what impact this will have on the success of the project.

Our analysis employs a four-point framework, including critical factors that can influence the overall governance and success of the cable system. It points to ways in which Liberia's institutional and policy arrangements for ACE may—or may not—lead to the benefits that have been ascribed to the country's membership in the consortium. The aim is to provide a basis for an informed discussion on how best to implement the proposed governance structure of the ACE cable system in Liberia.

2. SCOPE AND ANALYTICAL FRAMEWORK

For our purposes we can define governance as the way in which public authority is exercised. In this sense, governance can include the implementation of rules and regulations, managerial accountability and organizational efficiency, and a focus on participation and inclusion. These concepts are not mutually exclusive and contemporary notions of governance often include all three among others (Weiss, 2000).

In addition we are specifically concerned with Liberia, a country that may no longer be in an immediate post-conflict condition but is still deeply influenced by the repercussions of past conflicts. Of particular relevance are the post-conflict impacts on governance. This can include a disruption in the functioning of government, the dissolution of civil society organizations, limited technical capacity for policy formulation and implementation, personal mistrusts and animosities, particularly powerful individuals or coalitions in the diaspora due to conflict-induced displacements, a flood of individuals returning from abroad, and growth in the informal economy. All of these conditions can effect and challenge the exercise of public authority.

[5] http://www.pri.org/stories/world/africa/fiber-optic-cables-finally-bring-reliable-Internet-to-liberia-west-africa-6899.html (accessed June 11, 2012).

Another potential post-conflict governance challenge is the loss in legitimacy of the state itself, particularly in the eyes of the larger population that suffered during conflict. This stems in part from systems of governance that were perceived to benefit only a select few during the time of conflict. Indeed, in Liberia as is common in other post-conflict states, some of these same elite actors (by which we simply mean those who have a significant influence on public authority whether from the public, private or civil society sectors) who were prominent during the conflict have assumed leadership roles in the interim and subsequent government as part of the reconciliation process (Hensell & Gerdes, 2012). Thus elements of illegitimacy that can build up during the conflict periods will also color perceptions of government among the population post-conflict.

Beyond the position of conflict entrepreneurs in post-conflict governance, the special role of elite actors including those who did not play a role within the conflict itself, surfaces in these post-conflict settings. Kalu (2004) argues that the influence of elites on governance, although ubiquitous generally, is particularly significant in the African context. Thus the actions of these elite actors become particularly important when considering governance in Liberia both from a post-conflict and an African position.

2.1 ACE in Liberia: An Analytical Framework

In conducting our analysis, we employed a case-study approach making use of a combination of primary and secondary source data. This included semi-structured interviews of key actors in the Liberian government, telecommunications sector, and among relevant international organizations working in the country. Interviewees were selected based on their participation in and/or knowledge of the ACE cable system and the wider telecommunications sector. The analytical framework described below guided the interview questions. In addition, we examined a variety of stakeholder reports (e.g. from USAID and the World Bank), local newspaper articles on the ACE system, and related ICT stories.

To better understand the explicit and implicit arrangements supporting the implementation of ACE in Liberia, we began by mapping out the numerous actors involved in the ACE eco-system and their relationships to each other (see Figure 1 below). Within this space, our analysis pointed to five relevant levels of governance. Each level of governance, or decision-making, involved a different set of actors. Although not completely independent of each other, they have unique characteristics that make them worthy of independent examination. These five governance levels are:

1. Decision-making and cooperation between the entity that will oversee the physical and commercial link to the ACE system, the Cable Consortium of Liberia (CCL), and the ACE consortium itself.
2. The operating relationships among the members of the CCL.
3. The engagement of the CCL with other actors in the local ICT sector.
4. The nature and role of the Liberian Telecommunications Authority (LTA) as the government regulator in charge of the sector.
5. The collaboration between the various international agencies working in the telecommunications sector and the GoL.

The rest of this paper consists of analyses at each of these levels of governance. We supported this by drawing on previous work looking at the policy development process in post-conflict contexts such as that of Liberia (Best & Thakur, 2009). Specifically we paid particular attention

to factors such as institutional arrangements, technical capacity, political support and elite attributes at each governance level. Together these four factors explain the various ways in which the actors at each level work together, how decisions are made, and what are some of the possible areas for improvement. Given the nature of the relationships involved, some factors are more applicable than others for a given level.

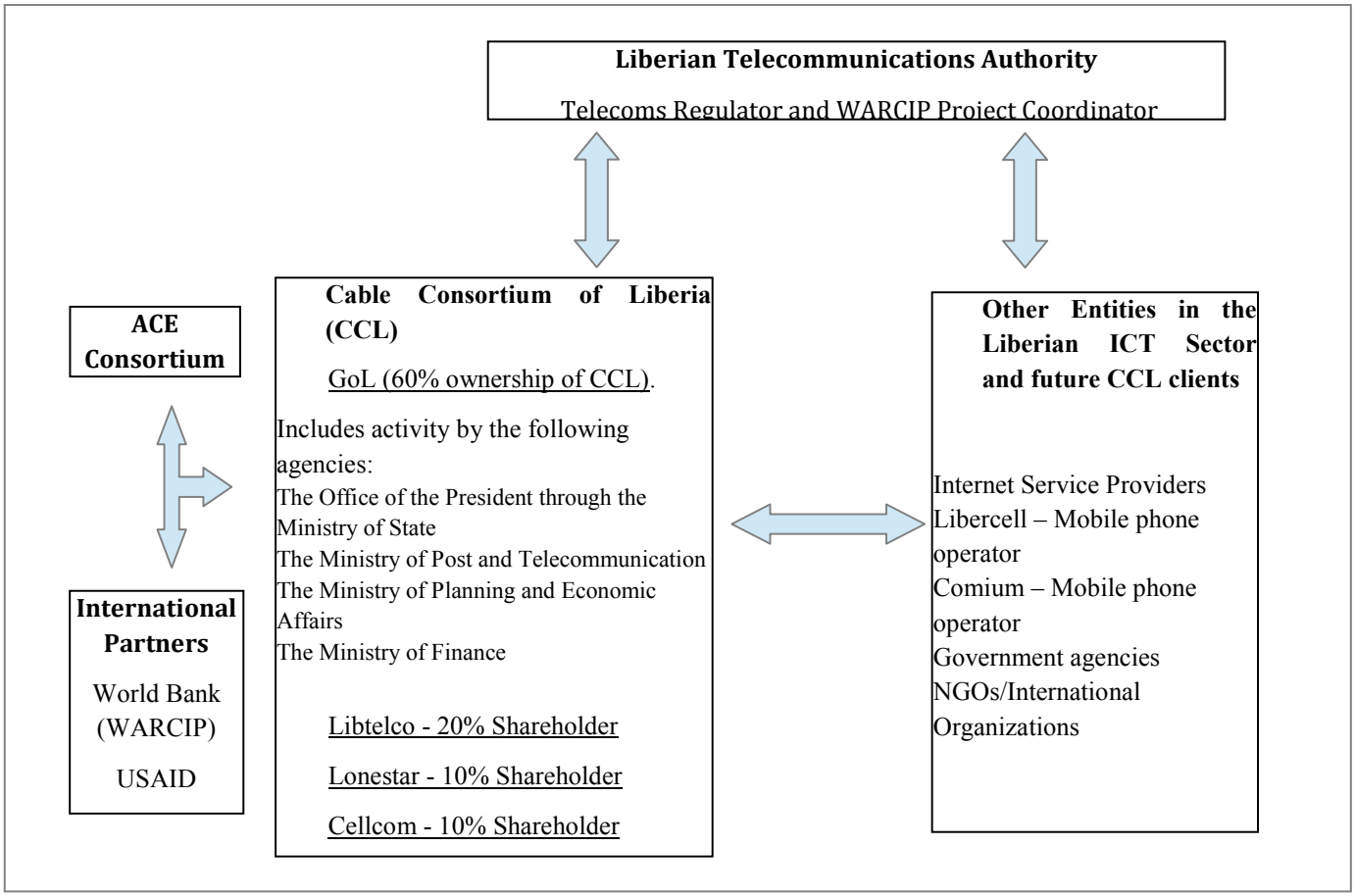

Figure 1: Levels of Governance for the ACE Cable system in Liberia[6]

3. THE MANAGEMENT AND GOVERNANCE OF ACE IN LIBERIA

3.1 The Relationship between the Cable Consortium of Liberia (CCL) and the ACE Consortium

Liberian membership to the ACE consortium was initiated in May 2010 as a public private partnership (PPP) with the incorporation of the Cable Consortium of Liberia (CCL). The CCL formally joined the ACE consortium the following month. The CCL is the entity that, as a member of the ACE consortium, will manage and operate the cable landing station in Liberia. In June 2010, the CCL entered into a Construction and Maintenance Agreement (CMA) with the ACE Consortium with respect to the cable infrastructure in Liberia.

The CMA outlines the specific institutional arrangements that govern the relationship between the CCL and ACE consortiums (CCL, 2011). The agreement defines the CCL as the designated landing party for Liberia, which means that the CCL has authority to (1) design, construct, and

6 Adapted from (Victor, n.d.)

maintain the cable landing station in Liberia, and (2) use and assign to its shareholders its allocated capacity under the ACE cable system. Thus, the main purposes of the CCL are to secure access and interconnection to the global Internet through the ACE cable system, and to provide commercial and other services in Liberia via that system.

In terms of political support, we found this to be widespread given the promised impact of acquiring improved international connectivity through the ACE cable system. Some evidence of this comes from the numerous media reports, both domestic and abroad, which have reacted positively to the initiative[7, 8]. None of these reports, however, focus specifically on matters of governance between the CCL and the broader ACE consortium. This is presumably because it might be perceived as simply a detail within the larger goal of achieving broader Internet access in Liberia as well as the problems of information access due to the private and often confidential nature of much of the ACE and CCL deliberations.

Several factors appear to be relevant in influencing the relationship between the ACE consortium and the CCL. At this governance level, the legal arrangements provided by the CMA appear to be a significant factor in defining the decision-making process between the CCL and the ACE consortium. In addition, the personal influence of key elite members within the CCL is a critical decision-making factor, and one that is in regular flux. For exampled, the extensive influence of Libtelco in the initial formulation of the CCL may actually have made other operators and even international partners hesitate to collaborate with the CCL.[9] However, this too is constrained by the legal basis of operation between the members of the CCL.

3.2 Operating Relationship between Members of the CCL

The CCL includes the following shareholders: the government, (60 percent of shares); government-owned Libtelco (20 percent); and two mobile phone operators Lone Star (MTN) and Cellcom (each with 10 percent). According to its Shareholders Agreement of June 3, 2011, the CCL only creates a contractual relationship between the members and is not a partnership or other form of joint venture. As such, the benefits that accrue from the CCL to its shareholders are proportionate to their level of ownership. This relates to the beneficial access and use of the ACE-allocated capacity and the CCL's co-location and other facilities. As a result, the Liberian government as the largest shareholder should benefit the most from earnings derived from commercial services related to the Liberian Consortium's allocated bandwidth.

The historical relationship between the shareholders is relevant in understanding their working relationships in the cable consortium, which have been strained and contentious at times. According to the Liberian media, Cellcom and Lonestar have accused each other of anti-competitive business practices, including an assertion by the latter that it was owed $1 million by the former.[10] Meanwhile, Cellcom accused Lonestar of blocking calls from its network.[11, 12]

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7 See for example: Weedee, E. (2011, October 5). Liberia: New Telecommunications System Will Foster Nation's Development. *Heritage.* Retrieved from: http://allafrica.com/stories/201110060323.html.

8 Allen, B., & Hugh-Jones, R. (2011, November 18). Liberians hope long wait for the web is finally over. BBC News. Retrieved from http://www.bbc.co.uk/news/world-africa-15692430.

9 Personal communication, Members of the LTA, March 13, 2012.

10 Liberia: GSM War -Lonestar, Cellcom Clash As Subscribers Complain. (2011, May 24).The Informer. Monrovia, Liberia. Retrieved from http://allafrica.com/stories/201105260846.html.

This situation is complicated by the fact that Libtelco also allegedly owes Lonestar approximately $500,000.[13] In both cases Lonestar is allegedly owed money due to arrears in call-settlement payments from the smaller Cellcom and Libtelco networks. According to reports, the other operators have been slow or negligent in meeting these payments but have also raised complaints against Lonestar for misuse of a dominant market position.

While such disputes among vigorous competitors are natural, in this particular case stakeholders have surfaced these disagreements as potentially detrimental to the smooth operation of the CCL[14]. Furthermore, while the existing competitive position and disputes exists entirely at the retail level, the CCL demands new points of cooperation - and thus potential dispute - at the network wholesale level[15].

Another important relationship, informed by history, is that between Libtelco and the government. According to the National ICT and Telecommunications Policy, the government owes Libtelco more than $20 million "in uncollected receivables for goods and services" (Ministry of Post and Telecommunications, 2010: 14). It further states that the LTA shall apply fees and other payments due from Libtelco against this outstanding debt.

Most of the PPP stakeholders broadly anticipate GoL divestiture and the privatization of the network. Should this divestment program go forward as planned, it would allow existing operators an opportunity to expand their shares in the cable and new operators to buy into the CCL. While divestiture is a requirement of the project, given the potential revenue stream from the CCL's commercial services there is some concern that the GoL could hesitate in proceeding with this divestiture (World Bank, 2010).

As with the previous governance level (between the CCL and the ACE consortia), the institutional arrangements codified in the Shareholders Agreement help explain the decision-making process within the CCL itself. This is crucial for appreciating the how the CCL will function. In addition, at first glance, political support and technical expertise (provided mainly by the World Bank) would appear to be significant issues. However, it is important to recognize the potential influence of elite actors in the Liberian context. Such influence is often exercised informally or implicitly, and results in decision-making that involves a bargaining process among elites. Furthermore, this pattern is not uncommon in the post-conflict context, where bureaucracies and institutions are still emerging (Best and Thakur 2009). For instance, evidence of the post-conflict reality of elite actor influence and bargaining has been developed in Liberia (Best and Thakur 2009), Iraq (Best 2011), and across Africa (Kalu 2004).

That said, this pattern may not necessarily have a negative impact on the CCL or the ACE project in general if it can remain secondary to the formal arrangements outlined above, such as the CCL's guideline for non-discrimination in its provision of services. Informal bargaining can become more important where it overlaps with formal rules and institutional relationships.

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[11] Liberia: Interconnect war breaks out between Cellcom and MTN's Lonestar. (2011, May 27).The Balancing Act, (556). Retrieved from http://www.balancingact-africa.com/news/en/issue-no-556/telecoms/liberia-interconnect/en

[12] The LTA itself has publicly warned all operators against engaging in this practice: Edwin G. Genoway, Jr. (2011, September 9). LTA Warns GSM Companies. The New Dawn. Retrieved from http://www.thenewdawnliberia.com/index.php?option=com_content&view=article&id=4225.

[13] Personal communication with Lonestar (MTN), Dec 13, 2012.

[14] Personal communication, Cellcom, ; Personal communication, Lonestar, .

[15] Personal communication, World Bank, September 17, 2012.

Thus, the various contested debts members owe to one another might become bargaining tools when interpreting the rules on access to CCL facilities.

3.3 Relationship between the CCL and other actors in the ICT sector

The third level of the governance of ACE in Liberia is the relationships between the CCL and the various other actors in the national ICT community. This includes both the public and private sectors. As before, the first factor used to analyze this level is the nature of the institutional arrangements. According to the CCL's Shareholders Agreement, allocation and use of cable capacity is to be guided by certain open access rules. First, the CCL will sell commercial services on a non-discriminatory basis to non-consortium members. Second, there may be no discrimination on access to co-location, hosting and other facilities of the CCL.

The Shareholders Agreement also states that based on the decisions of the board, shareholders can give "reasonable" preference to CCL facilities in terms of commercial services and access, as long as the same terms and conditions are offered to other entities. This is in keeping with another stated goal of the CCL, of promoting the interests and welfare of its shareholders in securing access to the ACE system. Thus, while non-discrimination in access is required, it will be important to determine what constitutes "reasonable" preference to CCL members. In this regard, the LTA as sector regulator will play a crucial role.

Political support is particularly important when examining this governance level. Within the government, there has been a positive reception to the ACE project. Indeed the initial phase of the development of the national Internet backbone, mentioned earlier, will start with connecting several government agencies. Currently there is no physical network connection between GoL agencies and ministries. The creation of a comprehensive government network should improve the efficiency of the public sector as well as the delivery of public services.

Besides the strained relationships between members of the CCL, another challenge is the relationship between companies across the ICT sector. The Liberian ICT market has been marked by common elements of vigorous competition and long periods of conflict, punctuated by episodes of limited cooperation. This has been observed in the behavior of the mobile phone operators who belong to CCL, who argue over physical co-location of their network, interconnection, and settlement payments for the transit of calls between networks. The situation has been exacerbated due to the LTA's historical challenges in enforcement and arbitration capacity.

The mutual distrust of mobile operators needs to be understood in the context of the long period of conflict in Liberia, when many mobile phone operators and other companies operated in a highly independent manner and cooperated in a very limited fashion in the absence of any meaningful state authority in the sector. The heads of these companies then resisted the creation of the LTA in its current form preferring the status quo of limited government regulation of the sector.[16] Thus, another elite attribute of relevance to ACE in Liberia is the attitude of the major ICT companies towards the government and its state-owned enterprises. Some of these view the LTA as weak or ineffective and see Libtelco, with its National Operator designation, as inefficient and undeserving of government support.[17]

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[16] Best, M.L. and Thakur, D. (2009) "The telecommunications policy process in post-conflict developing countries: the case of Liberia," *info,* Vol. 11 Iss: 2, pp.42—57.

[17] Personal communications with representatives from Cellcom and Lonestar, December 13, 2011

3.4 Role of the Liberian Telecommunications Authority (LTA)

The National ICT & Telecommunications Policy (Ministry of Post and Telecommunications, 2010) states that the LTA will develop the appropriate regulatory framework to ensure open-access and non-discrimination in the operations of the CCL. Also, the LTA has been designated as the implementing agency for the WARCIP-Liberia project. Therefore, the LTA is crucial in ensuring a functional and successful collaboration between members of the CCL and between the CCL and other ICT stakeholders.

However one challenge for the LTA is elite attitudes towards its operation and function. Since its establishment under the Telecommunications Act of 2007 the LTA has struggled to enforce its authority over major mobile phone operators. This struggle is evident in the payment of interconnection fees, which mobile operators pay to other companies when connecting calls across their networks. As noted earlier, some mobile phone operators, including members of the CCL such as Lonestar and Cellcom, have charged others with being in arrears on interconnection fees. In fact, as the LTA has endeavored to enforce interconnection and settlement payments between operators its relationship with members of the CCL has become strained. These tense relations were displayed in public arguments after the LTA suspended Lonestar's operating licenses for two weeks. LTA was responding to Lonestar's refusal to connect to the Cellcom network in retaliation for Cellcom's alleged settlement arrears.[18]

One factor undermining the LTA's authority is the far greater scale and wealth of the telecommunications companies compared to the GoL's resources in this sector and the LTA. The mobile companies are the largest in the ICT sector and, in fact, Liberia's telecommunications revenue as a percentage of the country's GDP is one of the highest in Africa.[19] As with many developing countries, a regulator can be overwhelmed by the companies that it monitors. This is perhaps even more so in Liberia due to the the LTA's weak technical capacity and the country's ailing infrastructure.

Another problem is the industry perception of LTA. The agency has been viewed historically as unable to provide the leadership and environment that might have led to the resolution of disputes between companies.[20] The problem has been compounded by instances where the operators have perceived the LTA as overzealous. In other cases, operators feel that the LTA has not been able to effectively deliver on its own regulatory services.[21] Since its establishment the LTA has been constrained by a lack of sufficient technical and human resources to carry out its functions.

These factors—the attitude of telecommunications elites towards the LTA, the LTA's leadership challenges and its lack of technical skills and resources—all make it difficult for the agency to successfully monitor and evaluate the CCL. As noted above, it is crucial that the LTA be able to authoritatively determine what is a "reasonable" preference with regard to the CCL's commercial services and to preserve the non-discrimination mandate of the CCL. The LTA is a relatively young regulator; over time, it will no doubt grow and improve.

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[18] Balancing Act. (2012, June 8). LTA suspends MTN Liberia's licence, reports says. Retrieved August 1, 2012, from http://www.balancingact-africa.com/news/en/issue-no-608/telecoms/lta-suspends-mtn-lib/en

[19] In 2007 (the latest year for which comparative data is available) this figure stood at 8 percent in Liberia. Source: http://databank.worldbank.org (Accessed May 31, 2012)

[20] Personal communication, Lonestar representative, December 13, 2011

[21] Personal communication, Lonestar representative, December 13, 2011

3.5 International Support

From the above discussion it is evident that significant international support has enabled Liberia to join the ACE consortium. For example USAID supported the preparation of rapid assessments to inform the GoL and others of possible business models for joining the ACE consortium. The largest international financial contributor to the ACE activities in Liberia is the World Bank. An initial World Bank technical mission to Liberia had sensitized the GoL to the possibilities and benefits of joining ACE as well as conceptualizing their participation as part of a regional program including Sierra Leone.[22]

It should be noted, however, that the LTA and GoL approached the World Bank only after other sources of finance had been explored. Also according to some informants, the World Bank was initially hesitant to support the GoL in this work.[23] This hesitation came in part from Libtelco's participation in the project as a state-owned enterprise: the World Bank and other local and international stakeholders have previously lobbied the GoL to privatize Libtelco. Although the GoL says it intends to privatize Libtelco, in the short term the government appears to want to first improve the state of the company prior to a sale (PPIAF, 2011).

The World Bank has supported the ACE connection in Liberia through the regional WARCIP initiative, as mentioned earlier. The WARCIP-Liberia loan agreement specifies some of the institutional arrangements between the World Bank and the GoL with regard to ACE in Liberia. The loan has three components: The first and largest ($21 million) addresses Internet connectivity, primarily covering the cost of membership in the ACE consortium. The second is to help formulate and implement policies, regulations and institutional arrangements to support long-term Internet connectivity ($3.32 million). The final component ($1.28 million) is for project expenses, including a project-implementation unit based at the LTA.

The underlying logic behind large infrastructure projects such as these is that there will be a trickle-down benefit for the population as a whole. However, the Bank's own reviews suggest that these benefits have not always been realized in the past.[24] One of the Bank's proposed strategies for ICT infrastructure projects is to ensure that Universal Access Funds focus on the poorest populations within a country.[25]

In Liberia the Universal Access Fund aims to guarantee that at least some of the benefits of the WARCIP-Liberia project go to the marginalized. Money from the GoL's sale of its stake in the CCL will go to this fund giving additional weight to concerns about the GoL's lack of motivation to divest its stake and its preferred timing. It is worth considering that the WARCIP-Liberia loan will need to be repaid at some point, which might influence the government's decision on divestiture.

One characteristic of elite attributes among international actors is their willingness to explore opportunities for collaboration with each other. For example, both the World Bank and USAID have cooperated in supporting the GoL throughout the ACE initiative. This included information sharing and collaboration on the rapid assessment reports on the economic feasibility of the CCL, developing of terms and hiring consultants, reviewing reports, and overall coordination in providing technical assistance to the CCL. This example of international

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22 Personal communication, World Bank, October 9, 2012.

23 Personal communication, Members of the LTA, March 14, 2012

24 World Bank (2011), "Transformation Through Infrastructure: World Bank Group Infrastructure Strategy Update, FY 2012–2015." Washington DC: The World Bank.

25 Ibid.

elite actor collaboration provides an interesting counter-point to the seemingly frequent lack of collaboration among domestic elite actors.

4. SUMMARY AND RECOMMENDATIONS

The focus on key factors (institutional arrangements, technical and human resources, political support, and attributes of elites), positioned against five layers of governance, has helped highlight several key issues to be considered as the ACE project develops in Liberia. Several recommendations follow from this analysis. The first relates to the CCL's framework. One challenge with complex PPPs such as this one is the potential for corruption. Although the LTA should provide independent monitoring and oversight, one safeguard that could be added is to explicitly require that all CCL procurement be subject to the Public Procurement and Concessions Commission in Liberia. This requirement will have the added benefit of endorsing and supporting government efforts to undermine corruption that plagues the economy.

Government of Liberia divestiture of their stake in the CCL has been surfaced as a key issue by numerous stakeholders. This is critical for financing the national backbone and Universal Service Fund, which will support countrywide access to the Internet. While the GoL might initially hesitate to sell its stake it could be encouraged to do so once the CCL is a commercial success and the value of its shares increases. The eventual sale should incorporate diaspora networks as a way to create opportunities for Liberians abroad to participate in the country's development. The GoL should also consider the strategic timing of the sale of its shares in the CCL and the sale's potential impact on any future divestiture of its interests in Libtelco.

A crucial factor in the success of the CCL is non-discrimination in the provision of commercial services. The LTA will play a crucial role in enforcing this standard. Fair enforcement will reduce tensions between the CCL shareholders and win support from the decision-making elite in Liberia's ICT sector. The LTA's intermediary role within the CCL will also be important in ensuring that the CCL can work effectively in establishing Liberia's domestic connectivity while working within the broader ACE consortium. By providing efficient services within the CCL, the LTA can overcome its historical image as a weak regulator and take a greater leadership role in the management of the sector. This can be achieved in part by utilizing its position as the implementing agency of WARCIP in Liberia to improve its own technical and human resources.

Balancing informal bargaining among elites with adherence to formal rules, facilitating compromise among ICT companies, and creating more positive perceptions of the LTA and Libtelco are all major challenges that may affect the success of the ACE initiative. In some ways these challenges are beyond the scope of LTA as sector regulator and WARCIP-Liberia implementing agency. Because these attributes of ICT sector elites may be relevant for other sectors of the Liberian economy the government will need to look broadly at ways to address these challenges. A first step will be to better align the governance of the ACE initiative in Liberia with the GoL's effort to join the Open Government Partnership.[26] In fact, the GoL could use its participation in the CCL as a demonstration project to promote greater transparency and governance in the ICT sector.

Finally, a key international partner for the GoL is the World Bank through its WARCIP project. The Bank's own experience points to the difficulty of ensuring that the benefits from projects such as these will reach the most marginalized. The GoL should not only consider the future

[26] Facsimile copy of Liberia's commitment to Open Government Partnership http://www.opengovpartnership.org/countries/liberia (Accessed June 19, 2012)

sale of its stake in the CCL as a way to support the Universal Access Fund, but should also actively explore new partnerships with other international and regional partners to develop ICT-based social and economic innovations for the poor in Liberia.

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