

REGULATORY IMPACT IN GHANA

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ABSTRACT

As the Ghanaian economy moved from a regime of command and control to a market oriented one, several far-reaching economic reforms have been implemented to help transform the economy and put it on a path leading to the attainment of middle-income status. These reforms, in most cases, sought to relax the regulatory environment such that regulations serve more as lubricants for fair competition than as barriers in the way of economic development. The telecommunication sector was also blessed with one of these reforms. In the wake of the telecom sector reforms, the state-owned Post and Telecommunication Corporation, the only major player in the telecom sector at the time, was split into two entities namely Ghana Post and Ghana Telecom. In a bid to liberalise the sector, Ghana Telecom was privatised and a second network operator (SNO) was licensed to create a duopoly in the telecom industry.

Prior to the telecom sector reforms, not-less-than four regulatory bodies were regulating the sector but their functions were ceded to the National Communications Authority (NCA) as the sole regulator of the sector as the reform gathered momentum. The stage was, therefore, thought to be set for a fair competition among operators. The rate of infrastructure development more than doubled and the quality of service improved slightly during the post-reform period. However, the two network operators could not meet their expansion targets set in their licences in terms of fixed line installations. Heavy pecuniary penalties were slapped on them. Operators mostly blamed their non-performance on the Regulator's inability to create a level playing field in the sector. The key problem of the sector centres on interconnectivity between operators but the Regulator has not been adequately and firmly positioned to deal with this problem.

For the Regulator to make an impact it is suggested that the NCA Board be properly constituted while efforts are made to appoint its substantive head, develop its regulatory guidelines, and make it completely independent of governmental control.

REGULATORY IMPACT IN GHANA

1.0 Introduction

Various types of regulations exist in Ghana. These include regulations on business commencement, financial intermediation, trade, taxation, labour, utilities, copyright and patent. While most of these regulations in the past sought to protect players in their respective sectors by creating barriers to market access and restricting trade and new investment, significant changes in regulations as noted in Aryeetey (2002) have occurred in Ghana over the last decade that seek to promote competition and attract investment to Ghana. In fact, Regulatory and Administrative Cost Survey (RACS) by Bruks Associates Ltd. (2003) reveals that domestic businesses do not perceive safety regulations, business licensing, inspections of all kinds, and labour regulations as posing a problem for business but these regulations rather present a competitive environment capable of attracting investment to Ghana. To foreign-owned firms, the Survey observes that issues bordering on access to utility services, unpredictability and complexity of laws and policies seem to pose a major problem.

With regard to access to utility services, the problem has been one of delays in extending water and electricity to the premises of companies and providing telephone connection. It is of interest to note that in the water and electricity sub-sectors, the operators are essentially monopolistic limited liability companies with Government of Ghana as the only shareholder. These are the Ghana Water Company, which does water treatment and distribution, and Electricity Company of Ghana, which distributes power generated and supplied by Volta River Authority from its hydroelectric plant at Akosombo and Kpong and thermal plant at Aboadze. The telecommunication sub-sector, unlike other utility sub-sectors, has seen significant privatisation and liberalisation though the government still has a stake in Ghana Telecom, one of the five operators currently in the sector. The government is also considering liberalising the water and electricity sub-sectors to ensure adequate private participation.

With the liberalisation of the telecommunication sector and subsequent establishment of the National Communications Authority (NCA) there have been interesting activities in the sector. However, both the government and the general public are of the view that the performance of the players in the sector over the years leaves much to be desired. The operators in the sector continue to blame one another for their non-performance. Their regulator, NCA, seems incapable of monitoring the performance of the various players in the sector so as to promptly help players in the sector quickly resolve their differences and improve upon their performance. On the other side of the fence are potential players who think that the only way that performance improvement can come about is for all potential players outside the playing perimeter to be allowed in to help generate competition in the sector. The NCA seems not to be in favour of this view. Its approach and strategy all this while has been to tread the path of telecommunication liberalisation cautiously. In fact, NCA tends to subscribe to the view that liberalisation of the sector must be gradually carried out and not to open the “floodgates” for all manner of potential players to enter the field at a go.

This study intends looking globally at regulatory impact assessment of the utility services sector in Ghana. This paper, however, will restrict itself to regulatory impact analysis of the telecommunication sector. The recent activities in the sector prompt one to pause and ask the following questions:

1. How has the telecommunication sector performed since the time of liberalisation?
2. What are the problems facing the sector?
3. In what ways have regulations impacted the performance of the players in the sector?
4. What is the way forward for the players in the sector?

In trying to answer these questions, the study draws on interviews with the key players in the sector notably the NCA and Ghana Telecom and on other related studies. The paper is organised as follows: Introduction is taken up in section one; section two touches on telecommunication sector reforms in Ghana with section three outlining the regulations and functions of regulatory bodies in the telecommunication sector; in section four, performance of the operators in the telecommunication sector is discussed while section five analyses the impact of regulations on the performance of operators in the sector; and section six draws a conclusion by suggesting how the regulator of the sector could be made more effective.

2.0 Telecommunication Sector Reforms

The early part of the 1990s witnessed another dimension of the market reforms implemented under the Economic Recovery Programme (ERP)/ Structural Adjustment Programme (SAP) that was launched in April 1983. In line with the objective to carry out far-reaching reforms that will transform every facet of the economy under the ERP/ SAP, the telecommunication sector reforms were initiated in 1993/94. But what conditions necessitated these reforms?

Before the reforms the postal and telecommunication services were handled solely by the Ghana Post and Telecommunication Corporation (GP&T). The general deterioration in the Ghanaian economy in the late 1970s and early 1980s affected the performance of GP&T. However; GP&T did not see any significant transformation with the economic revival that came with the ERP until early 1990s. As at 1992, the general performance of GP&T was poor and reflected variedly in low and stagnant telephone penetration rates, poor quality of service for those who had access and higher international tariffs for those who managed to get through with the international direct dial. The rate of access to phone in homes was 3 phones per 1,000 inhabitants and its distribution was skewed in favour of urban dwellers especially those in Accra. For instance, according to International Telecommunications Union (ITU) (1994), over 80% of all phone lines were in urban areas while estimated phone lines in Accra in 1990 were about 53.6% of the total lines in the country.

It must be pointed out quickly that the failure of GP&T to expand at a rate higher than the rate of 1,000 lines per annum in the 1980s and early 1990s was not due to lack of demand for telephone services. In fact, it was on record that, about the same time, demand was estimated to be in excess of supply by 150,000 lines (3 times the existing number of lines). The emergence of “communication centres” which provided fax and phone services at rates ten times higher than the GP&T’s tariffs shows that demand was not a constraint on GP&T’s expansion (Haggarty et al, 2002). GP&T’s failure to expand rapidly could not be attributed to lack of funds either since the World Bank and other multilateral donors made available US\$173 million for investment in the telecommunication sector in 1988 but this project was executed three and a half years behind schedule. This apparent inefficiency in execution of projects could be partly attributed to tied-aid investments that the sector received over the period, resulting in GP&T having switches from six different manufacturers contributing to long repair times and high maintenance costs (Haggarty et al, 2002). By and large, the failure of GT&P to expand its network was largely due to poor management and inefficiency resulting partly from tied aid investments in the sector.

The reforms began with the launch of the Accelerated Development Plan (ADP) for the telecommunication sector in 1994. Its main objectives were to ensure sustained improvement in the availability, reliability and quality of communication services; expand employment opportunities in the sector; improve public access to telecom services in rural and urban areas by way of payphone and mobile phone facilities; and to ensure that telecom tariffs are affordable and competitive and confer economic returns on telecom operators (Frempong, 2002; Haggarty, 2002). To realise these goals, the Plan spelt out strategies such as privatisation of Ghana Telecom, creation of a competitive duopoly in the telecom sector, liberalisation of value added services, and establishment of a regulatory body for the sector.

Thus, in 1995, GP&T was split into Ghana Post and Ghana Telecom (GT) as separate companies. Ghana Telecom was privatised and a second network operator Western Telesystems (Westel) Ltd was licensed. A licence was also issued to Capital Telecom Ltd, a private indigenous telecommunication company, to provide rural telephony to some villages and towns in the southern parts of Ghana. One feature of state-owned monopolies in the utility services sector prior to the reforms was that they tended to combined operational responsibilities with policy and regulatory roles. Thus, to a large extent, GP&T was acting as a player and a referee at the same time before the reforms. As the telecommunication sector in Ghana underwent privatization and liberalization, there was the need to assign the regulatory roles to an independent body that will oversee the development of the sector. Consequently, the National Communications Authority Act (Act 524) was promulgated in 1996 paving the way for the establishment of the NCA.

A host of telecom value added providers emerged with the liberalisation of the telecommunication sector. Notable among them are the mobile phone operators most of whom were licensed before the establishment of the NCA. In fact, multiple licences for cellular operators were awarded as far back as 1992. Millicom Ghana Ltd began its

operations in 1992/93 with Mobitel as its network name. Celltel started its operation in 1995 with a network name “Celltel” which was later changed to “Kasapa”. Scancom also entered the market in the same year using a network name “Spacefon”. In 2001, Ghana Telecom introduced its mobile phone services under a network name “One Touch”.

Aside the mobile phone providers, there are internet and public data providers of which Network Computer Systems (NCS), Africa Online, Internet Ghana Ltd and Ghanaclassifieds are the leading companies among 46 internet services providers that are licensed to operate. They have a combined subscriber base of about 150,000. Other value added providers are the public pagers that include City Pagers, American Telecom Systems, Punch Communications Ltd and Page One Communications Ltd (ISSER, 2003).

3.0 Regulations and Regulatory Bodies

Before the reforms four regulatory bodies were regulating the activities of GP&T. These were Ministry of Transport and Communications (MOTC), Ministry of Finance (MOF), Ghana Frequency Regulation and Control Board (GFRCB), and GP&T itself. Table 1 shows regulators and their associated regulatory tasks before the telecommunication sector reforms.

Table 1: Key Regulatory Tasks and Regulators before Telecom Sector Reforms

Regulatory Task	Formal Regulator
Licences: A. General	MOTC
B. Frequency	GFRCB
Tariffs: A. Service Charges	GP&T and MOTC
B. Frequency Charges	GFRCB
Allocation of number services	MOTC, GP&T
Frequency Regulation	GFRCB
Type Approval	GP&T,GFRCB
Interconnection Agreements	MOTC, GP&T
Arbitration	MOTC, GP&T
International Regulatory Cooperation	MOTC, GP&T,GFRCB
Finance Regulations (Budget and Borrowings)	MOF
Performance Contract	MOF
Legal Means of Enforcement	MOTC, GP&T,GFRCB
Advisory Function vis-à-vis MOTC	None/GP&T

Source: Adapted from Haggarty et al, 2002

According to Haggarty et al (2002), these multiple oversight agencies slowed procurement procedures and tariff adjustments, and reduced accountability and transparency in decision-making. Thus, the inefficiency and poor management of GP&T could be partly attributed to these multi-institutional regulations.

Clearly, there was the need to vest all regulatory tasks in one body at the onset of privatisation and liberalisation in the sector. In December 1996, the NCA Act (Act 524) was passed. The Act assigns to the National Communications Authority a general objective of regulating communication by wireless, cable, radio, television, satellite and similar technology to ensure efficient service delivery, sanity in the operations of the various players, and rapid development of the sector. Among other objectives of the NCA are the promotion of fair competition among the players, protection of operators and consumers from unfair conduct from other operators with respect to quality of service and payment of tariffs, and protection of consumers' interest. In pursuit of these objectives, the ACT confers on the NCA the functions of granting licences for the operation of communication system; assigning, allocating and regulating the use of frequencies; providing tariff rules and guidelines; and advising on policy formulation and development strategies to the Minister of Communications. In addition, the NCA is empowered by the Act to inspect the operators; issue fines and revoke licences for non-compliance with the set standards; and ensure that operators comply with agreements on interconnectivity, tariffs setting and information delivery to the NCA (Haggarty et al 2002; Frempong, 2002).

In spite of the numerous responsibilities assigned to and powers conferred on the NCA, its independence is not properly safeguarded by the Act. There are three main things in the Act that betrays the independence of the NCA and renders it helplessly ineffective in the discharge of its functions and responsibilities. The first item that compromises NCA's independence is the appointment of all members of its board by the President. Thus, the board can be removed at any time by the President for "stated reasons" (Republic of Ghana, 1996; Haggarty, 2002). This suggests from the onset that the appointment of the NCA Board will be plagued with political manoeuvres and interference. Secondly, the Act subjects the NCA's functions to the directions of the Minister of Communications who also serves as the chairman of the Board (Haggarty, 2002). For instance, according to the Act, "(The Minister) may give to the Authority such directions of a general character as appear to him to be required in the public interest relating to the discharge of the functions of the Authority (Republic of Ghana, 1996). Thus, the functions of the NCA will also suffer political interference. Thirdly, the financial autonomy granted the NCA by the Act is a recipe for excessive meddling in its affairs by those who think it is a place of milk and honey. In fact, the Act empowers the Authority to generate funds by requiring fixed percentage of total turnover of fixed and mobile phone operators. The Authority collects a further 1% of operators' turnover for Ghana Investment Fund for Telecommunication (GIFTEL) (Haggarty, 2002) to promote rural telephony in particular and development of telecommunication in general. The use of these funds or the budget setting by the NCA has, however, not been specified in the Act apart from the annual report that the Board must present to the President through the sector Minister.

The NCA has no substantive head up to now. Its day-to-day functions are directed and supervised by an Acting Director-General. Since it was established in 1996, it had no board until 2000, prior to the elections, when the President appointed members of the board only to be dismissed by the new government and a new one formed (Haggarty, 2002). However, the NCA has been able to issue licenses and assigned frequencies to all the operators in the sector including those who were already in existence before the Authority was established.

4.0 Performance in the Telecommunication Sector

The performance of operators in the telecom sector can be judged using pre- and post-reform analysis of the operators' infrastructure base and quality of service delivery. Table 2 shows the number of fixed lines and payphones installed annually by GP&T/GT before its official licensing by the NCA on 20th June 1997. Post-licence installations of fixed lines and payphones by Ghana Telecom and the expansion targets for the period of exclusivity are presented in Table 3.

Table 2: Pre-Licence Installations of Fixed Lines and Payphones by Ghana Telecom, 1994-1996

Phone Type	YEAR			
	1994	1995	1996	Total Existing Lines, 1996
Fixed Lines	1,300	13,100	14,800	77,900
Payphones	1	1	426	453

Source: Adapted from Frempong, 2002

Table 3: Post-Licence Installations of Fixed Lines and Payphones by Ghana Telecom, 1997-2002

Phone Type	YEAR						Total for Exclusivity period
	1997	1998	1999	2000	2001	2002	
Fixed Lines	27,600 (25,000)*	36,082 (50,000)	26,204 (50,000)	46,080 (50,000)	45,874 (50,000)	39,065	181,840 (225,000)
Payphones	30 (300)	1,332 (300)	1,229 (300)	134 (300)	1121 (300)	699	3846 (1,500)

Source: Ghana Telecom, Accra

* Figures in parentheses are the expansion targets in the operational licence for the period of exclusivity.

It is clear from Table 2 and Table 3 that for the three years immediately before licensing GP&T/GT installed about 9,750 fixed lines on average annually. GT's average annual installation of fixed lines over the three years immediately after licensing was 29,962 lines, representing a jump in annual fixed line installations of about 200% during the post-reform period. The total of existing payphones as at end-1996 was 453. By the end of exclusivity period in 2001, the number of payphones increased by 3,846, a jump of about 849%. However, as shown in Table 3, GT's performance in terms of telecom infrastructure development, especially fixed line installation, fell short of the target set in its licence. At the end of the exclusivity period, GT was expected to roll out about 225,000 fixed lines but ended up rolling 181,840 lines, representing shortfall of 19.2%. It must be noted that GT exceeded its target for payphone installations by 156.4%.

Performance of the second network operator, Westel, in terms of fixed line installation was also below target. The company was expected to install 50,000 lines by the end of 1999 but as at end-2001 it installed only 3,000 lines. Consequently, the penalties for non-performance as contained in the licences were slapped on the two companies. Ghana Telecom is to pay \$44 million and Westel, \$70 million to the NCA.

Tables 4 and 5 show the regional distribution of fixed lines and payphones installed respectively by GT during the post-reform period. Clearly, the distributions of fixed lines and payphones skewed positively towards Greater Accra Region. In 2002, for instance, Greater Accra Region took about 69.9% of total fixed lines and 44.3% of total payphones installed by GT. All the Westel lines are also in the Greater Accra Region.

Table 4: Regional Distribution of Fixed Lines Installed by Ghana Telecom, 1998-2002

REGION	YEAR				
	1998	1999	2000	2001	2002
Greater Accra	27,752	17,537	25,987	30,516	27,291
Ashanti	4,882	1,515	5,156	3,579	2,468
Central	857	2,210	5,571	3,306	1,139
Western	1,151	1,254	946	703	2,950
Brong Ahafo	360	871	856	1,324	1,916
Northern	112	1,549	2,127	1,075	602
Eastern	77	231	1,824	1,437	1,498
Upper East	304	378	2,357	536	573
Upper West	176	620	1,196	936	380
Volta	411	39	60	461	248
National	36,082	26,204	46,080	45,874	39,065

Source: Ghana Telecom, Accra

Table 5: Regional Distribution of Payphones by Ghana Telecom, 1999-2002

REGION	YEAR			
	1999	2000	2001	2002
Greater Accra	1,401	1,460	1,861	2,171
Ashanti	592	637	848	937
Central	118	120	194	241
Western	212	212	304	323
Brong Ahafo	73	80	112	166
Northern	99	100	136	190
Eastern	333	335	444	485
Upper East	86	100	147	155
Upper West	53	53	92	112
Volta	77	81	161	218
National	3044	3178	4299	4998

Source: Ghana Telecom, Accra

Table 6: Quality of Telephone Service, 1992-1998

Performance Indicators	ITU Standard	Yearly Performance			
		1992	1994	1996	1998
1. Call completion Rates (%)					
Local	90	54	74	83.3	81.7
Trunk	90	43	52.2	70.3	65.5
International out-going	80	51	45.2	64.5	67.6
International in-coming	80	25	14.4	30.3	60.7
2. Fault per 100 lines per year (%)		159	176	86	---
3. Average Down-Time (days per line per year)	5	30	9.2	6.5	---

Source: Ghana Telecom, Accra, as in Frempong, 2002

Looking at the performance of telecom operators in terms of quality of service, we can see from Table 6 above that, generally, quality of service prior the reforms was very bad as measured against the standards of the International Telecommunications Union (ITU). However, with the reforms the quality of service has been improving but not up to the expectation of the general public. Of late the public outcry has been against the alleged suppression of calls originating from GT to the mobile phone operators especially Spacefon. It has become almost impossible getting a call through to Spacefon through GT fixed network. While Spacefon lays the blame at the door-step of GT, GT says the problem is principally due to congestion on its network that results from the relatively low tariffs that the NCA has approved for its services.

5.0 Impact of Regulations on the Performance of Telecom Operators

So far the regulator has not function effectively as one considers the disputes regarding interconnectivity and GSM allocation in the sector. The NCA's position is that operators should agree on interconnection fees between themselves and it will only be in case of deadlock that it will step in (Daily Graphic, Sept. 9, 2003) despite the powers conferred on it by the NCA Act to impose default interconnection agreements when necessary (Haggarty, 2002). This non-interference attitude of the NCA has resulted in series of disputes between telecom operators. Westel had to defer commencement of its operations from January 1997, when it was licensed, to January 1999 because of interconnection disagreements with GT. Thus, to some extent, the inability of Westel to meet its expansion targets was due to problems of interconnectivity. Also, Capital Telecom's profitability and expansion is also affected adversely by the interconnection fees that it has to pay to GT. For all calls between GT and Capital Telecom, GT takes 75% while Capital Telecom takes 25% of the proceeds. Between Westel and GT, proceeds from local calls are shared equally; in case of trunk calls the originating network takes 70% with 30% for the network where the calls terminate; and for international in-coming calls the gateway network takes 80% while the rest goes to the terminating network. Clearly, the nation-wide network of GT encourages its entrenched position in interconnectivity negotiations (Frempong, 2002).

Another interconnectivity problem was between GT and Spacefon. While GT accused the NCA of not creating a level playing field for fixed phone and mobile phone operators, Spacefon accused GT of using "unconventional methods and uncompetitive practices" to get from the regulator, a particular rate to be charged to their customers for calling from a fixed line to mobile (Daily Graphic, Sept. 9, 2003). According to GT, the loss it incurred on its operations in 2002 was partly because it had to pay ₵90 billion to mobile operators in that year. GT also attributed its inability to expand to inadequate revenue generation from its operations.

The NCA places a price cap on the fixed line operators but mobile phone operators are allowed to charge anything. Thus, until recently while Spacefon, a mobile operator was charging ₵3,000 per minute, Ghana Telecom, a fixed line operator was charging ₵600 per minute. Moreover, while mobile operators do not pay anything to GT for calls originating

from mobile to fixed line, GT has to share with mobile phone operators in the ratio 1:4 the amount realized from calls originating from its end to mobile phones. This clearly affects profits of GT. Worst of all the relatively low tariffs charged by GT resulted in congestion on GT's network as mobile subscribers prefer using GT's network to make calls, either to a fixed phone or a mobile phone, to using their mobile phones to make calls. All that they mostly do with their mobile phones is using it to "flash" unless the calls they want to make are urgently necessary. Of course, consumers as rational economic agents cannot be compelled to use their mobiles to make calls unless there is a compelling economic incentive. This congestion, according to GT, is affecting the quality of service of all operators in the industry.

However, the inability of NCA to regulate the sector effectively stems first from the fact that the regulations that the NCA should use in regulating the industry has not yet been passed by Parliament. Thus, the NCA has no legal guidelines to use in its intervention in the industry. The government has responded to the recent confusion in the sector by saying it will clear the mess by drafting a policy to address the issue of interconnectivity (Daily Graphic, Sept. 13, 2003). Secondly, the fact that most of the operators are well seated in the political system of the country (Frempong, 2002) it is very difficult for the NCA put its foot down lest it incurs displeasure from those who set it up. For instance, when the NCA invoked the non-performance clause in the licences issued to fixed line operators by imposing a penalty for non-performance of \$70 million on Westel, the government, under external pressure, slashed the penalty to \$25 million (Daily Graphic, October 29, 2003). It is therefore no surprise when African telecommunication regulators at an ITU forum in Accra recently made it clear that the problems confronting the telecommunication sector were not technical, monetary or regulatory issues but were mainly of politicians' interference in the regulatory functions of regulators. They therefore urged African governments to "desist from interfering with information, communication and technology (ICT) transformation and allow experts and regulators to perform effectively and efficiently" (Ghana News Agency, Nov. 12, 2003).

6.0 Conclusion

The Accelerated Development Plan for the telecom sector covering the period 1994-2000 brought about liberalisation of the sector and privatisation of the only state-owned operator, GP&T. To guide the sector's total development and ensure fair competition among all operators, the NCA was established. However, the NCA is not fully developed and its impact is not felt on creating a level playing field for the rapid development of telecommunications in Ghana. The Authority is not able to stand on its feet principally because the Act that established it has failed to make it completely independent of undue political control. The telecom sector has therefore been plagued with interconnectivity and tariff disputes which are mostly solved through ministerial intervention. To make the Regulator function effectively, there is the need to properly constitute the Board, appoint a substantive head, develop its regulatory guidelines, and make it completely independent of governmental control. In this way, operators in the sector can have confidence in the Regulator as it tries to create a level playing field for a fair competition in the industry.

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