The telecommunications policy process in post-conflict developing countries: the case of Liberia

Michael L. Best and Dhanaraj Thakur

Michael L. Best is an Assistant Professor at Sam Nunn School of International Affairs, School of Interactive Computing, Georgia Institute of Technology, Atlanta, Georgia, USA. Dhanaraj Thakur is a PhD Student, School of Public Policy. Georgia Institute of Technology, Atlanta, Georgia, USA.

Abstract

Purpose - The purpose of this paper is to develop an understanding of the telecommunications policy process in immediate post-conflict countries and how that process differs from traditional settings.

Design/methodology/approach - The authors consider the case of Liberia, a country that recently emerged from a protracted civil war. The authors focus on the Liberian Telecommunications Act of 2007 and the processes through which this act came about by applying a modified research framework. This framework identifies several factors in the literature that are posited to influence the policymaking process in developing countries. The authors also include other factors based on previous studies in post-conflict countries. The aim is to test the usefulness of this framework using the 2007 act. The authors apply it through the use of interviews with key actors in the government, industry, and international agencies. This was supplemented by secondary data from published reports and other sources

Findings - From the framework the authors identify the main factors influencing the telecoms policy making process in Liberia such as a weak and nascent institutional environment, intra-governmental competition, limited human and technical resources, the supportive (especially initially) role of the international actors such as the World Bank, and the dominance of elite groups in decision-making. The authors then make suggestions on overcoming some of existing challenges to the sector.

Originality/value - This paper looks at the intersection of research in telecommunications policy, policy processes and post-conflict countries, an area in which there is currently very little work. The results indicate that several dimensions of the framework are germane to the post-conflict case and that some of these observations are also relevant to the future development of telecommunications in these countries.

Keywords War, Telecommunications, Liberia Paper type Case study

1. Introduction

Of concern to governments is the articulation and implementation of policies to achieve their goals. While there are various factors that can affect policy outcomes, many of them external to the policy under consideration, one area that is the subject of research and analysis is the policy process itself. By better understanding the process through which policies are formulated, developed and implemented we can achieve better outcomes. Many components of the policy process are sometimes not based on rational analysis and are instead highly political (Stone, 2002) and this can cloud our understanding of this phenomenon. Fortunately, informed with an understanding of these complexities, several theories and frameworks have been posited to improve our understanding of the policy process (see for example the edited volume by Sabatier, 2007).

Many of these frameworks have been applied to policy arenas outside of telecommunication policy. While there are a few studies on the development of telecommunication policy, the processes underlying the development of such policies are generally not well understood (Galperin, 2004). Another area in which there is still limited understanding of the policy

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process is in developing countries. Many of the existing frameworks were developed using evidence from the US and to a lesser extent Europe. Even less researched are policy processes in immediate post-conflict countries, which in many cases are a subset of developing countries. The achievement of successful policy outcomes can be seen as being even more crucial in such states given the potential to revert to violence as a result of policy and associated failures. Therefore understanding the underlying processes that are involved in shaping and enacting policy can be important to post-conflict reconstruction.

This paper seeks to further our understanding of the combination of these three under-studied phenomena: the telecommunication policy process in post-conflict developing countries. In order to examine these issues, we use the case of Liberia, a country which recently emerged from civil war and is in the process of rebuilding its government and economy. Telecommunication has been viewed by the government as a key tool in realizing some of its developmental goals (GoL, 2005, 2008). In July 2007, it passed the Liberian Telecommunications Act of 2007. We use the development of the 2007 Act as the focal point of our research. In so doing we seek to explain the process through which this Act came about, place this process within a wider policy framework, and examine the concomitant implications for the development of the country. This work will also improve our understanding of how the telecommunications policy process in immediate post-conflict countries differs from that of traditional settings.

The outline of this paper is as follows. First we review the existing theories of public policy processes and telecommunications policy in particular. Next we look at the application of these theories to developing countries and post-conflict countries in particular. This discussion will allow us to identify the main dimensions for analysis in our proposed research framework. This framework is then applied to the development of the 2007 Telecommunications Act in Liberia. We link this analysis to the development of the telecoms sector, the operators and infrastructure, in country. Finally we briefly look at ways in which our framework could be improved and how this can contribute to public policy theory in general.

2. Conventional theories of the public policy process

Over the decades several theories and frameworks have been proposed to improve our understanding of the process of developing public policies. These include the Advocacy Coalition Framework (ACF) that argues that the policy process occurs in a competitive environment where various coalitions of actors hold differing beliefs and as a result advocate for different positions within a policy subsystem (Sabatier and Jenkins-Smith, 1999). Punctuated equilibrium theory, as espoused by Baumgartner and Jones (1993), seeks to explain the observation that policies consist of periods of ostensible stability and incremental change followed by major and radical changes, and propose that this pattern is intensified by political institutions in the US. The multiple streams framework as developed by Kingdon (1995), looks at three key streams in the agenda-setting process: problems, policies and politics. With the aid of policy entrepreneurs, these streams are sometimes brought together to significantly increase the chances that a particular issue will be considered by policymakers. The Institutional and Analysis Development (IAD) framework (see for example Ostrom (2005)) uses institutional analysis to typically explore self-governance problems.

These and other frameworks typically address policy arenas in the US and to a lesser extent Western Europe. Punctuated equilibrium and the multiple streams models particularly assume a political and institutional context similar to that of the US. With the ACF, there has been some application of its framework to the developing country context, however this has been limited. For example, Beverwijk (2005) attempts to examine higher education policy in Mozambique (1993-2003) using the ACF. Apart from improving our understanding of how education policy developed during this period in Mozambique, she also tries to ascertain the applicability of the ACF outside of the western industrialized context. Her results showed that the ACF's theoretical assumptions of stable and pluralistic decision-making systems are difficult to apply within the context of a country with nascent policy subsystems and a recent turbulent political past. Finally, the Institutional and Analysis Development framework is

rather often applied to developing countries, unlike the previous examples. However, the policy arenas studied by IAD have been limited to common pool resource problems such as those involving forests or fisheries (see for example Ostrom *et al.*, 1994).

Grindle and Thomas (1991) suggest that they are four contextual factors that influence the development of policy in developing countries. These are the level of technical analysis used in addressing the problem, political stability and support related to the policy issue, bureaucratic motivation and capacity for formulating and implementing the policy, and international aid and support. Also, following elite theory, Kalu (2004) suggests that public policy in the African context often reflects the goals and interests of the political and economic elites. Unlike the assumption that in developed countries this is created in part by the apathy of the masses, in many sub-Saharan countries the dominance of the elites stems instead from the marginalization of the masses. Agenda setting is the result of a bargaining process between elite interests that is then advanced as the public interest.

3. Aspects of the telecommunications policy process in developing countries

Given the importance of the evolution and development of new technologies in this arena, policy learning becomes important. Following the conceptual distinctions in the literature made by Bennett and Howlett (1992), policy learning here refers to the accumulation of ideas, scientific/technical knowledge and/or experiences on how to deal with a particular policy issue from both internal and external sources. Therefore it becomes critical to the policy process in reducing the uncertainties of a changing technological environment.

Additionally, a relatively broad set of stakeholders must be considered within telecoms environments. Aufderheide (1999), for example, looked at policymakers, lawmakers and lobbyists in relation to the development of the 1996 Telecommunications Act in the US. Within developing countries where there is less technical capacity and thus greater reliance on foreign technical and financial support, factors such as international policy networks can be critical to understanding the policy process. True and Mintrom (2001) argue that transnational networks and policy diffusion help to explain the similarity in policy innovations that have been adopted by a variety of states. The importance of international policy networks could also help to explain the emphasis on provision of services through market-based competition in telecommunications policies across several states. Within these networks, other relevant non-state actors can also be influential on policy including consultants, think-tanks, foundations, academic institutions (Stone, 2001).

Additionally, the significance of international policy diffusion for developing countries is partly the result of the advocacy of international organizations such as the World Trade Organisation (WTO) and the International Telecommunication Union (ITU), both of which through several mechanisms have promoted the establishment of information and communication technology (ICT) polices/strategies by all countries. As an example, Nigerian telecoms liberalization was instigated partly through the promotion of reforms by international donor agencies (Ndukwe, 2005). In cases, where policies are transferred from one country or institution to another, Dolowitz and Marsh (2000) suggest that this can happen in different ways: lesson drawing (involving the rational evaluation of alternative polices), voluntary (but driven by perceived necessity such as international acceptance), and coercive transfer (i.e. direct imposition by an aid agency).

4. The public policy process and post-conflict countries

While the above factors apply to developing countries in general, the case of post-conflict countries requires additional considerations. By post-conflict societies we are referring to countries that have recently emerged from a period of war and where relevant parties have entered into some form of a peace agreement. In addition this might also involve a new period of transition that is marked, for example, by an election; there are increased levels of security and a perception of opportunity for recovery among international and local actors (Macrae *et al.*, 1995).

There are several common structural characteristics that are often found in post-conflict countries that have implications for the policy processes that are central for reconstruction.

These include a breakdown of government systems and the concomitant poor delivery of government services, such as health care, education, infrastructure, etc. Post-conflict countries often have a low absorptive capacity for foreign aid immediately after the conflict. Unfortunately, because of the attention of the media and the public to countries immediately following the end of the conflict (or the "CNN effect"), this is the point at which foreign aid is the highest (Collier and Hoeffler, 2004). This period is also distinguished by high public expectations for an immediate peace dividend and unrealistic donor expectations of the reconstruction efforts.

Bornemisza and Sondorp (2002) note that post-conflict countries are also characterized by a civil society that is fragmented, a distorted economy with a reduced tax base and a pervasive informal economy. The nature of the conflict can also complicate the strategy for reconstruction. For example, the conflict could have included neighboring countries or focused on ethnic divisions. Additionally, post-conflict societies that consist of weak horizontal ties across groups prolong the need for intervention and reconstruction efforts (Coyne, 2005).

The focus of most foreign aid includes support for creating adequate institutions for future development. As such, most reconstruction efforts emphasize institution building. However there are several challenges related to this aspect of post-conflict development as local institutions would have been altered by the scale, type and duration of war. For example the establishment of an ineffective judicial system in post-conflict Mozambique meant that commercial banks could not rely on the courts to recover bad debts and thus they increased their lending rates to account for this additional risk (Aron, 2003). Using the case of Rwanda, Uvin (2001) notes that while, for example, institution building is seen as key, building court houses and drafting laws alone will not bring about justice. The substance of institutions (and not just the form) is much more difficult for donors to influence.

The post-conflict situation often leads to the question of legitimacy for the new governing regime. As such its authority may not yet be fully recognized or acknowledged. This could be exacerbated where patterns of decentralized decision-making developed during the conflict period persist. Thus, non-governmental groups and international agencies might choose to continue working in their preferred areas and not accede to the regulation of the new government (WHO, 2000).

The issue of limited capacity also affects the policymaking process. Conflict often results in a significant brain drain of local expertise from government and academic institutions. The return of such persons in the post-conflict period could create tensions with those who remained during the conflict (WHO, 2000). Collier (2003) suggests that a lack of capacity leads to several options for the post-conflict country. Along with the donor agencies, the government could bypass local capacity constraints altogether and employ external donor supported firms and organizations to provide the required services. Alternatively, they could build temporary capacity by hiring and attracting nationals who live both locally and abroad.

Finally, another characteristic of policymaking in the post-conflict context is that the process can become disrupted and fragmented (Bornemisza and Sondorp, 2002). This often results from a lack of comprehensive sectoral policies which means different agencies can be simultaneously engaged in a sector with different strategies. Also, given the need for rapid change, the government might choose to emphasize one policy goal over another. Using the case of Uganda, Macrae *et al.* (1996) show that after inheriting a dilapidated health infrastructure system, subsequent policies emphasized the reconstruction of health infrastructure at the expense of other issues such as sustainability and equity.

5. Research framework

While the above discussion has allowed us to identify some of the relevant factors influencing policymaking in post-conflict states, these cases are typically limited to a few policy arenas. These include health policy (Macrae *et al.*, 1995; Bornemisza and Sondorp, 2002), economic development (Monge, 2006), or general reconstruction with no focus on a specific sector (Cramier and Goodhand, 2002). One of the aims of this paper is to add to the

literature by looking at another key policy arena – telecommunications. In order to understand the processes underlying the passage of the Liberia Telecommunications Act (2007), a suitable theoretical framework will have to be utilized.

Our discussion thus far has pointed to variety of factors that should be considered in understanding this phenomenon and how existing theories have not focused on a policy process in this context. We employ a qualitative framework that builds on these factors and the work of Grindle and Thomas (1991) mentioned earlier. They had articulated four factors which influence the policy process in developing countries: technical analysis, capacity, political stability and support, and international aid. We combine technical analysis and capacity and add the following factors: attributes of elites, international policy networks, and the institutional context (see Figure 1). Our brief review of the literature above indicates that each of these factors can influence the policymaking process. However, previous studies have not sought to comprehensively examine the factors influencing the policy process in post-conflict countries. Thus, the motivation behind this framework is to overcome some of the limitations of traditional policy process frameworks as well as to focus on the specific context of post-conflict developing countries. We then test this framework using the case of Liberia.

The framework allows us to examine many of the factors that are postulated to influence the policy process in post-conflict countries. However, it does not immediately address the causal relationships between these various factors and policy outcomes. Instead it helps us identify some of the important issues influencing the policy process and this, we hope, will allow stakeholders to focus attention on those factors most critical to the development of effective public policies. Also, it is hoped that this framework will provide utility for similar research in other post-conflict states.

The six factors are further detailed as follows:

- 1. Institutional context. This refers to the institutional arrangements governing the telecommunications sector in the pre, during and post conflict periods. It would include the government agencies responsible for regulation, policy and monitoring, enforcement mechanisms, relevant laws governing the sector and changes to those laws, operating relationships between industry players, and the mode of sale and provision of services to customers. Also of relevance is the existence of informal institutional arrangements that could have developed from weak formal institutions pre and post conflict.
- 2. *Technical and human resources*. This includes the nature and scope of the policy analysis employed, associated technical capacity to conduct such analysis, assessment of costs,

Figure 1 Modified framework to support analysis of post-conflict nations Factors Influencing the policy process in post-conflict states Technical and Human Influences Resources developing countries in Political Support general **International Support** Attributes of Elites **Particularly** relevant to International Policy post-conflict Networks states **Institutional Context**

the type and quality of data available (e.g. telecommunications indicators) both to decision-makers and policy analysts and how such information is used. Other issues include the ability of assigned agencies to define and get consensus on policy goals, level of pay, morale and skills, nature of policy learning from external sources, previous experience and the impact of brain-drain (if any) in this area. Finally, the availability of specialized equipment is also crucial for telecoms regulation.

- 3. *Political support*. Which includes the priority given to telecoms by the government, the scope for public debate and discussion around the issue, popular interest in the use of telecommunications, the position of industry groups (e.g. telecoms providers, ISP's, etc.), the political influence of employees in the sector and the degrees to which political decisions follow technical/bureaucratic advice. Also, as mentioned earlier, the perception of legitimacy in the eyes of both local and foreign actors must be considered.
- 4. International support. Which includes level of aid dependency, level of donor coordination, preference for projects/policy initiatives and capital/recurring costs by donors, administrative requirements of donors, and the degree to which interventions are geared towards areas of donor expertise rather than country needs. Another issue is the type and nature of policy transfers.
- 5. Attributes of elites. Relevant factors would include telecommunication policy priorities of elite actors, preferred approach to policy implementation and decision-making (Macrae et al., 1996), and political and other compromises in terms of decision-making and implementation.
- 6. International policy networks. Includes the level of participation of the government in international and regional initiatives/organizations working on the policy issue (e.g. ITU, AISI, etc.), the level of involvement of local and international NGOs in telecoms policy and programs within the country, telecoms policy recommendations made by bi-lateral and multi-lateral donors and their associated level of support for the government, and the nature of partnerships with academic institutions, think-tanks and consultants.

6. Methodology

Our approach has employed qualitative, semi-structured interviews with senior government personnel, political representatives and the management of telecoms firms in Liberia. Additionally, persons working in relevant areas in international agencies and NGOs were questioned. We developed an initial list of participants based upon public information and then employed snowball sampling techniques to further enhance our sample set. Questions were developed based on each of the dimensions of our research framework described above. Data was also gathered from secondary sources including existing policy documents, government and donor reports, and so forth.

7. Liberia - background

Liberia is a small country on the West African coast with a population of approximately three million people. It was founded by former American slaves in the early nineteenth century and enjoyed relative political stability until 1980. Since then, and over the past two decades, it has experienced major periods of civil war and instability. These conflicts involved a variety of groups and were often marked by bouts of internecine violence (Ellis, 1999). The result has been a significantly debilitated economy, damaged or destroyed public infrastructure and loss of human resources – perhaps one of the worst economic collapses since the second world war (Radelet, 2007). In 2003, after the end of the civil war, a peace agreement was signed in Accra, Ghana. This led to the formation of an interim government, the National Transitional Government of Liberia (NTGL), whose mandate was to lead peace and disarmament efforts until a permanent government could be formed; the NTGL transferred power to an elected government after national elections in 2005. Based on the results of these elections, Ellen Johnson-Sirleaf was sworn in as the new president in January 2006.

The cessation of violence allowed the return of many Liberians who were displaced during the war both internally and from abroad. Slowly normal economic activity is resuming though

the country remains impoverished with a reported 83 percent unemployment rate (IMF, 2008). In 2006 the GNI per capita was USD 130 (IBRD, 2007) and economic output was at 40 percent of the country's pre-war level (IMF, 2008).

Although the challenges are enormous, there are signs of improvement in the country's development. Economic growth was 9.5 percent in 2007 and was supported by an improved agricultural sector and the impact of large donor inflows on the services sector (IMF, 2008). Security remains a major concern as United Nations (UN) peacekeepers (through the United Nations Mission to Liberia (UNMIL)) are still stationed in the country while efforts to establish a domestic national security force continue.

To address these developmental challenges, the Sirleaf administration, in collaboration with multi-lateral partners, developed an interim poverty reduction strategy (the iPRS) that covers the period 2006-2008. The broad issue-areas targeted in this strategy are to improve governance and the rule of law, revitalize the economy, improve national security and support the re-development of the country's infrastructure. The emphasis on infrastructure includes attention to roads, electricity and telecommunications.

8. Framework results

8.1 Institutional context

We will now give an overview of the sector from the war to its present condition. Much of these historical details were gleaned through our interview processes. These historical elements are the contingencies by which institutional structures and contexts have developed.

Recognizing the sector's importance, immediately after the conflict ended in 2003 the NTGL went about trying to revive telecoms infrastructure. As with much of the other critical infrastructure in the country, telecoms had been severely affected by war with the entire fixed line copper network, owned and operated by the Liberian Telecommunications Corporation (LTC), destroyed or looted and major switching components stolen (Best *et al.*, 2007b). While there were several mobile phone companies present in early 2000, their operations were severely limited. One estimate is that in 2000, the total number of mobile phone subscribers in the country was just 1,500 (ITU, 2007). In addition, many of these mobile phone companies operated without clear licenses or rational spectrum allocations. The sector had been managed by the Ministry of Post and Telecommunications (MPT) and at that point in time there was no independent regulatory agency.

As Sesay (1996) notes institutional changes were not only critical for the development of Liberia but also to avoid reverting to the legal uncertainty that prevailed during the period of war. With this in mind the NTGL set up a Presidential Telecommunications Committee that revised the existing spectrum management plan and redistributed existing frequencies to the main mobile phone operators in the country. More importantly, with the support of the World Bank and with the consultation of the operators, the government passed an interim telecommunications law (Bill No. 18). The main goal of Bill No. 18 was to establish a regulatory framework for the sector including an interim regulator and to generally stabilize the sector until a more comprehensive law could be developed and passed. From this bill Liberian Telecommunications Authority (LTA) was created with a mandate for regulation of the sector while the policy-setting function remained with the MPT. The specific aims of the LTA included formalizing and managing the licensing regime.

Bill No. 18 was successful in bringing some regulatory clarity to the sector particularly from the point of view of the operators. As Bornemisza and Sondorp (2002) point out, interim laws can help restore some order and promote growth to a fragmented policymaking process particularly by setting the stage for future legislation. By 2005 (and also the end of the NTGL's mandate) the total number of mobile phone subscribers had significantly increased to 160,000 or 4.87 per 100 inhabitants (ITU, 2007). A 2006 survey estimated that 60-70 percent of populated areas had coverage (Best *et al.*, 2007b). In 2007, the mobile phone penetration rate had climbed to 15.01 percent (ITU, 2007).

Today there are four main mobile phone operators in the country as outlined in Table I. Note that we include subscribers figures reported in the media in 2008 only to give an indicative picture of the change in the subscriber base since 2006.

Under a stable operating and regulatory framework, competition among these operators has brought call rates to some of the lowest in the region (Balancing Act, 2007). Although this progress was encouraging, several issues remained. Bill No. 18 was designed as an interim piece of legislation with the main goal of establishing a regulatory framework for the sector. Other key issues such as access, consumer protection and interconnection were left for a more comprehensive Telecommunications Act. The process for the formulation of this Act started soon after the passage of Bill No. 18 and involved multilateral agencies such as the World Bank and inputs from the mobile operators. The initial draft was prepared during the last quarter of 2006 and after some debate the final act was passed by the legislature in July 2007.

Some of the stated goals of the Liberian Telecommunications Act 2007 are to support national development through telecommunications, promote the development of the telecommunication sector through the market as much as possible, affordable access, a fair regulatory regime, and support for foreign and local investment in the sector while also encouraging Liberian ownership and management in telecommunications companies. The 2007 Act replaced the previous Bill No. 18 as well as the 1973 act that had created the LTC.

In terms of organizational functions, the act reiterated the roles that were outlined in Bill No. 18. That is, the LTA is responsible for establishing and managing a radio-spectrum plan, issuing licenses, resolving disputes between operators, preventing anti-competitive practices, etc. The MPT has responsibility for developing telecommunications policy and advising the government on related national and foreign policies.

The actual distribution of these functions was initially difficult to establish. For example, it was almost a year after the creation of the LTA through Bill No. 18 that the MPT formally transferred regulatory functions to the new agency. This was due in part to differences in the leadership of the two organizations (Thakur *et al.*, 2007). These tensions were not directly reflected in the language of the 2007 act but they contributed to a delay in its passage originally slated for late 2006. The final language of the act clearly delineates the functions of and precludes interference in the operations of the LTA by the MPT. In practice, the institutional relationships between these agencies and between the LTA and the operators will be defined as the LTA goes about implementing various aspects of the law.

This is in fact a reflection of the wider institutional environment influencing policymaking in Liberia where personalities have had a great influence in the strategic decisions made in government agencies. Though some have argued that the long-term solutions to Liberia's problems lie in adequate leadership or institutional reform (Sesay, 1996), the answer is no doubt a combination of both. In order to move towards a greater reliance on rules outlined in the 2007 act, effective leaders are required who can guide this transition.

8.2 Political support

Another factor from our new six-point framework is political support. This includes support within the government, the private sector including the operators, and overall the

Table I Mobile phone operators in Liberia			
Company	Ownership	Estimated subscribers (2006) – (Best et al., 2007a)	Estimated subscribers (2008) – (New Democrat, 2008)
Cellcom Comium Libercell Lonestar	Israeli/American Lebanese Lebanese South African	165,000 25,000 65,000 150,000	268,000 90,000 23,000 354,000

perceptions of institutional and procedural legitimacy (or lack thereof) among the stakeholders.

In post-conflict nations questions of legitimacy of new governing institutions are often raised. This was particularly true for the nascent Liberian telecoms regulator and this perception strongly influenced the positions held by local operators towards the telecom legislative process. For example, the mobile phone operators were resistant to the expanded role of the LTA in the 2007 act. Most of the operators expressed their preference for Bill No. 18 with its limited scope for regulation and its focus on license regulation. The introduction of other issues such as universal access seemed outside the scope of the telecoms business from their point-of-view. The position of a limited government role is also the result of the experience of the operators themselves during and immediately after the conflict period. In the absence of any effective regulation, many of the operators effectively collaborated in a limited form of self-regulation to ensure that the industry functioned. Ascribing additional functions to the LTA, led some operators to question the necessity and legitimacy of an expanded regulator.

Another issue that was of concern to the existing mobile operators was the strategy to deal with the incumbent, LTC. A draft version of the act released for comment in late 2006 indicated that the government wanted to rebuild the LTC as a national telecoms operator with associated privileges. As the LTC was also considering entering the mobile phone market, the existing operators were concerned that this would create unfair competition. Some operators were concerned that their license fees could be used to help finance this entity. There was also concern from international observers such as the World Bank that had suggested that the granting of exclusive licenses to the LTC or not privatizing the incumbent could be harmful to the sector as a whole (IBRD, 2005).

The government on the other hand was concerned that all four mobile phone companies were foreign owned (Table I) and that this could have implications for national security, national pride, and development objectives. The 2007 act does allow for a licensee to be designated a "national operator" to ensure that national interests such as secure communications can be achieved where necessary. However, the specific definition of the rights and responsibilities of a national operator are left to the LTA and the MPT. Furthermore, it notes that a national operator cannot be afforded any competitive advantage as a result of this status. Finally, the 2007 act designates the LTC as a national operator and completely owned by the government (though it does not preclude any future privatization).

General popular political support for the Telecommunications Act is also important. Towards this aim the government held public consultations to discuss the draft law. However these where mostly attended by the local operators, legislators and relevant government agencies. Indeed, it is difficult to gauge public awareness of the process leading up to the passage of the law or the general public's ability to make contributions to these consultations. There is anecdotal evidence from the media, particularly newspapers, to suggest at the very least some awareness of the process.

Finally, we note that a critical element to securing political support for the sector is the presence of strong executive leadership. In the case of Liberia this leadership has been of mixed strength. The initial Minister of Posts and Telecoms and the interim Chair of the LTA neither had sufficient political support or technical capacity to provide significant sector leadership. Subsequent appointments within these two institutions may see the rise of more significant leaders. President Sirleaf herself, while commanding extraordinary international respect and significant domestic support does not have a great degree of personal interest or experience with the sector; in some ways she may lack the personal passion to champion this sector. Personnel within her executive offices have attempted to provide leadership but have failed to develop ties of support outside of the executive office to broader parts of the government, the domestic operators, or the international community.

8.3 Technical and human resources

Our interviews revealed an ongoing problem that exists in both the MPT and LTA, which is the lack of sufficient technical and human resources to support the development and implementation of policy. This includes, for example, not having adequate data on mobile phone subscriptions or on spectrum use. In fact this is a general problem facing Liberia's government agencies (IMF, 2008) and overall demonstrates the critical significance of this factor within our framework.

Specifically within the LTA there is need for spectrum monitoring equipment. There is also limited data on quality of service issues such as call quality, dropped calls, level of coverage, etc. Apart from data collection, technically experienced and qualified staff are also required to support the policy analysis capacities of both the LTA and MPT. The dearth of such personnel can be attributed to the brain drain that resulted from the conflict period as many Liberians fled the country. Subsequently some have returned, but the significant need for additional qualified persons remains. The government has stated that it intends to support the education and training of people in telecommunications but is constrained by a large array of development demands competing for a limited budget as well as difficulty in recruiting, training and retaining competent teachers.

8.4 International support

To help fill the gap in technical and human resources outlined in the previous factor, international agencies have assisted both the current government and the previous NTGL in formulating telecommunications policy. Key among these is the World Bank, which was instrumental in helping to develop first the 2005 Telecommunications Policy and Strategy and then Bill No. 18. Through its consultants the Bank provided the technical, legal and economic analyses to support formulation of the Bill. Several aspects of the Bill such as some of the functions of the LTA were also adopted in the subsequent 2007 Act. In addition to the Bank and along with other colleagues at the Georgia Institute of Technology, we have also been providing technical assistance to the LTA and MPT as well as more limited inputs to the Executive Office of the President.

International support therefore was instrumental in developing both Bill No. 18 and the 2007 Act. In general, the formulation and implementation of many of Liberia's policies are also supported by several multi-lateral and bi-lateral partners. For example, the Liberian Reconstruction and Development Committee are responsible for the overall management of the iPRS. This committee is chaired by the President and includes relevant government ministers, representatives from the World Bank, the US, the European Union, the United Nations, the Economic Community Of West African States (ECOWAS) and the African Union.

One of the main issues affecting policy generally is that the government does not have sufficient data collection facilities and this is compounded by a culture of not sharing information. This is evinced in a variety of areas such as health, education, and telecoms. Thus one immediate area of assistance by institutions such as the World Bank was to provide data on some basic indicators for the telecoms sector (see for example an initial report done by the Bank on the country's telecoms sector – IBRD, 2005). It should also be noted that the Bank's involvement added legitimacy to the process of developing the interim law – Bill No. 18 – in the eyes of the operators. Of course the importance of the bank's role should not be overstated. Legislators that we interviewed pointed out that whereas the bank was a major participant in the development of Bill No. 18, it was less actively involved in the formulation of the 2007 act.

Although the bank's intervention was designed to fill the gap in technical capacity, it follows the general pattern of how telecoms reform is instigated in many developing countries. External agencies aim to improve the sector through policies and best practice that have been accumulated elsewhere particularly when in similar contexts. This type of policy transfer through development assistance is of course typical in the developing country case and perhaps necessary in the post-conflict case. As mentioned earlier, Dolowitz and Marsh (2000) suggest that there are different ways in which this transfer can take place – lesson

drawing (involving the evaluation of alternative policy options), voluntary (but driven by perceived necessity such as international acceptance) and coercive transfer (i.e. direct imposition by an aid agency).

In the Liberian case, the Bank's influence on the 2007 act was less than in the previous Bill No. 18 as evinced by the sections of the act dealing with the LTC. It could be argued that the urgency of having an interim law and the circumstances at the time could have pushed the government to be more reliant on the bank. As the government was able to learn and gain experience from the implementation of Bill No. 18, its reliance on the bank also changed. In other words, policy transfer is moving from voluntary to one of lesson drawing because of the initial opportunity for policy learning facilitated by the bank. More recently, the relationship between the government and the bank with regard to telecoms appears to be strained partly because of the government's stance on the LTC. This could have implications for the development of future policy and the implementation of the 2007 act.

8.5 International policy networks

Another way in which policies can be influenced is through policy networks. These are social and professional networks of actors involved in telecoms whether locally or international. At the international level, typical fora for these networks could include ITU conferences for example. Apart from the World Bank there were few other major sources of policy support. Other external groups that were active in the sector include university researchers and NGOs such the Open Society Initiative for West Africa (OSIWA). The LTA also worked with the Federal Communications Commission (FCC) in the US.

Thus while the Liberian government worked with these organizations it was not necessarily part of a larger policy network; actively participating in or sharing experiences at conferences for example. This lack of participation stems in part from a lack of resources and the relative inexperience of the government in this sector. However, each of the groups it worked with were members of larger telecoms policy networks that were aware of policy experiences in a variety of contexts and who could therefore pass on this knowledge (such as international best practice) to the Liberian government. It could be argued that another reason for the general lack of participation in international policy networks could be that few civil society actors active in the telecoms sector. When compared to other policy issues for example such as gender mainstreaming, NGOs are an important set of actors in these policy networks (True and Mintrom, 2001).

8.6 Attributes of elites

We have already noted the importance of political support for the policy process across various stakeholder communities and the role of external and international actors. But within Liberia itself the work and relationships among elite actors is of considerable importance and makes up this factor within our framework. Indeed, within post-conflict settings we surmise that the role and attributes of elite actors plays an enhanced role compared to policy processes within stable nations. This is because post-conflict settings have generally very weak institutions (government ministries, corporate entities, new laws, and the like). This is nearly a tautological statement since civil conflict almost necessarily destroys institutions in country. In the presence of such weak institutions, the lack of classic Weberian forms of bureaucratic processes and control, and the reduction in institutional memories, the role and responsibilities of individual elites is enhanced. We believe that the introduction of this factor to our framework is of particular relevance within post-conflict settings. This is reflected in the Liberian case in several ways.

First, our interviews with ordinary Liberians revealed a peripheral but historic and cultural issue. That is, the distinction between Americo-Liberians (those Liberians that are descendents of the freed American slaves who founded the country) and the indigenous Liberians who comprise approximately 95 percent of the population (Sesay, 1996). Traditionally the Americo-Liberians have held positions of power in most sectors of the society including government. This appears to have continued under the civil administration that came to power after the 2005 elections. In addition, a proportion of those Liberians who

fled during the period of conflict to the US (not all of them Americo-Liberians) have returned and rejoined the economy. Some have also joined the government in various capacities, and these groups also have significant decision-making roles within the telecommunications policy process.

Second, the actual substance of policy was often the result of a bargaining process between these elite interests that is then advanced as the public interest. In addition to the initial competition between the MPT and the LTA mentioned earlier, there were also tensions between the LTA and other ministries in the government concerning the revenues that were received from the mobile phone operators. In one case, financial concessions given to the operators by the LTA were abruptly and publicly removed by the Ministry of Finance. Such tensions have also meant that the development and articulation of policies was sometimes fragmented. For example, at one point there was simultaneous development of separate telecommunications and ICT policies between the Executive Office of the President, the Ministry, and the regulator, all with considerable overlap. Recently (April 2008) the MPT released a single draft policy, combining IT and telecommunications policy, and purporting to represent the position of the government overall.

Finally, in addition to actual decisions, the institutional arrangements for policymaking (who participates, type of participation, etc.) were also determined by political and economic elites. Thus in this case although "public consultations" might mean inputs from outside of the government it does not necessarily mean the public at large, as mentioned above. In the case of the 2007 act, this often meant the mobile phone operators who were very well organized and prepared to comment on draft versions of the Act were the only active participants. There were limited opportunities for the general public to participate, especially those outside of the capital Monrovia. This was not necessarily intentional on the part of the government, but again reflected limited resources to facilitate larger participation. Consultations on the current draft national policy intend to take place in counties in the interior of Liberia with the hope of soliciting inputs from outside of Monrovia.

9. Implications for public policy theory in post-conflict contexts

As we have discussed earlier, traditional public policy theories are predicated on a pluralistic and competitive policy making environment, stable political environments and endemic institutions. These conditions, however, may not apply in immediate post-conflict settings. Using our framework we have highlighted some of the other dimensions for understanding policy processes in post-conflict countries. This framework has assisted us in understanding the main actors that were involved in the telecommunications policy process leading up to the 2007 act, how they related to each other and contributed to the Act and the issues which influenced these relationships. Table II provides a summary of the main findings of each factor as they relate to the 2007 act. While each of the dimensions was useful, there are elements that were difficult to observe and analyze. For example, the level of popular support for the 2007 act, the extent to which international partners can help to diffuse knowledge from other sources (networks) to the government of Liberia, or the specific compromises that were made between the different groups supporting the 2007 act all require additional study and sources.

We also discussed concepts that are typical across several public policy theories including policy transfer, policy learning and policy networks. While these were of relevance they occurred in contextually different ways. For example, policy transfer was often facilitated by international collaborators given the government's limited experience in the sector and the few alternatives for learning; policy transfer was also a source of policy learning for the government. It is unclear to what extent policy networks are relevant since there is little or no direct participation in them.

There is another concept in the policy literature that is not explicit in our framework – policy entrepreneurs. Policy entrepreneurs are persons who influence policies by working with those in an around government to effectively promote their policy innovations. Though this could have benefited the telecoms process, in our study there was no evidence of such an entrepreneur. We suggest that this stems from three reasons. First, is a lack of formal means

Factor	Key findings
Institutional context	Weak rules and a nascent institutional environment created the opportunity for individuals to influence the telecoms environment and for internal competition between government agencies and between the government and the operators to influence policymaking
Political support	Perceived lack of legitimacy was also a result of the nascent regulatory environment and influenced how the operators viewed the role of the govt. agencies in the new law. Sources of political support were limited to industry and the main policymakers in government
Technical and human resources	Lack of human/technical resources impaired the government's ability to develop policy and created the need for international support. This also affects the current implementation of the law
International support	International organizations such as the World Bank were instrumental in providing data and support for formulating initial policy and interim law though conflict with government exists
International policy networks	Such networks had little direct impact in this case because of limited participation in international networks and limited activity of NGOs in the sector
Attributes of elites	Most policy formulation and debates around key issues were done by elites in government and industry. Rules for participation also favored such persons

for participation in policymaking that can exist in post-conflict cases. Also, it is possible that the post-conflict environment might make it difficult for such persons to gain prominence given existing suspicion against certain (external) individuals having too much influence on political processes. Finally, a lack of local telecoms policy networks could limit the emergence of a policy entrepreneur as this is the mechanism through that they can be most effective (Mintrom and Vergari, 1998).

We can then summarize some of the key points about the policy process in post-conflict states identified from the application of our framework to the Liberian telecommunications case. First, policy transfer through international partners can also lead to policy learning in a situation where limited capacity can preclude other avenues for learning. However, policy learning through networks appears to be less relevant given limited participation. Second, the institutionalization of formal rules within organizations, such as the roles and responsibilities of government agencies, are dependent on the actual implementation of the law. This is the partly the result of a nascent institutional environment. Third, the interim period is critical for the efficacy of future policymaking. This is important for policy learning on the part of government and for reducing legal uncertainty in the sector. Also the length of the period is important. If the interim policy is viewed as effective and the period is too long, there is a risk of increasing the resistance to change. Finally, not only is decision-making dominated by elite groups in government and in the private sector, but the process of decision-making also favors these groups.

10. Implications for future Liberian development

The long-term development of Liberia represents a complex array of challenges and solutions, of which telecommunications is only one small but important part. As Sawyer (2005) notes, Liberia's future lies in democratic institutional change that will avoid the kind of marginalization that encouraged conflict in the past. At the same time, there are several immediate challenges to address including literacy, health care and security. If telecommunications is to play a part in that change, then its role in national development, how it is diffused to the wider society and ensuring its safe and effective use by the people are all questions for policy.

This paper has focused on this policy process and we have noted several aspects unique to post-conflict countries. We briefly show how these are related to the development of communications in Liberia and how they can be addressed. For example, the emerging institutional environment in the sector including tensions between inter-government agencies and between the LTA and mobile phone operators suggest that more time is required for the law to become effective. However, settling disputes through extra-institutional avenues can have a debilitating effect on the law and its associated policy goals.

Another issue is that of political support which has implications for the legitimacy of the law. A policy process that does not include the wider population can create problems during implementation. In this case, the inability to participate can also undermine efforts to be inclusive. Thus the government has to factor issues such as getting input from rural areas into the design of the policy process. Although the 2007 act has been passed, this process could be ongoing and inform implementation of aspects of the law.

The technical and human resource gap implies that challenges remain in the implementation and monitoring of policy goals. Given Liberia's condition, this problem could exist for some time. Opportunities that include working with international and especially regional partners should be pursued. As such, the need for international assistance remains and support should continue. Policy learning can develop through such partnerships and can be important to improving the overall capacity of the government, not only in the telecommunications sector.

11. Summary and conclusion

This paper develops an understanding of the telecommunications policy process in immediate post-conflict countries and how that process differs from traditional settings. We considered the case of Liberia, a country that recently emerged from a protracted civil war. We focused on the Liberian Telecommunications Act of 2007 and the processes through which this act came about by applying a modified research framework using qualitative research methods. Our results indicate that several dimensions of this framework are germane to the post-conflict case and that some of these observations are also relevant to the future development of telecommunications in the country.

There are some areas in which the application of the framework and therefore our understanding of the subject matter could be improved. We suggest that these could be areas for future research in Liberia and other post-conflict areas. These include understanding the awareness of and opinions about laws such as the 2007 act. Such research could improve the participatory mechanisms that could be useful in future policymaking exercises of the government. Another issue is that of policy entrepreneurs. Although we posited several reasons for their absence in the Liberian telecoms scenario, under what conditions would they emerge and also be effective in the post-conflict case? Finally understanding the mechanics of policy transfer or how international partners can help to diffuse knowledge to the government of Liberia would also be useful. For example, how do different structures of collaboration, such as the current Liberian Reconstruction and Development Committee, influence the policymaking process? Understanding this question could influence how development partners go about supporting telecoms or other policy processes in post-conflict states.

References

Aron, J. (2003), "Building institutions in post-conflict African economies", *Journal of International Development*, Vol. 15, pp. 471-85.

Aufderheide, P. (1999), Communications Policy and the Public Interest: The Telecommunications Act of 1996, Guilford Press, New York, NY.

Balancing Act (2007), "Liberia: four mobile companies bring lowest prices in West Africa", Balancing Act.

Baumgartner, F.R. and Jones, B.D. (1993), *Agendas and Instability in American Politics*, University of Chicago Press, Chicago, IL.

Bennett, C.J. and Howlett, M. (1992), "The lessons of learning: reconciling theories of policy learning and policy change", *Policy Sciences*, Vol. 25, pp. 275-94.

Best, M.L., Jones, K., Kondo, I., Thakur, D., Wornyo, E. and Yu, C. (2007a), "Liberia ICT: a perspective on the technology environment in Liberia", Open Society Initiative for West Africa.

Best, M.L., Jones, K., Kondo, I., Thakur, D., Wornyo, E. and Yu, C. (2007b), "Post-conflict communications: the case of Liberia", *Communications of the ACM*, Vol. 50, pp. 33-9.

Beverwijk, J. (2005), "The genesis of a system; coalition formation in Mozambican higher education, 1993-2003", available at: www.utwente.nl/cheps/documenten/thesisbeverwijk.pdf (accessed 18 December 2008).

Bornemisza, O. and Sondorp, E. (2002), *Health Policy Formulation In Complex Political Emergencies and Post-Conflict Countries: A Literature Review*, London School of Hygiene and Tropical Medicine, London.

Collier, P. (2003), "Building capacity in post-conflict countries", World Bank Social Development Notes, Vol. 14, pp. 1-4.

Collier, P. and Hoeffler, A. (2004), "Aid, policy and growth in post-conflict societies", *European Economic Review*, Vol. 48, pp. 1125-45.

Coyne, C. (2005), "The institutional prerequisites for post-conflict reconstruction", *The Review of Austrian Economics*, Vol. 18, pp. 325-42.

Cramier, C. and Goodhand, J. (2002), "Try again, fail again, fail better? War, the state, and the 'post-conflict' challenge in Afghanistan", *Development and Change*, Vol. 33, pp. 885-909.

Dolowitz, D. and Marsh, D. (2000), "Learning from abroad: the role of policy-transfer in contemporary policy-making", *Governance: An International Journal of Policy and Administration*, Vol. 13, pp. 5-24.

Ellis, S. (1999), The Mask of Anarchy: The Destruction of Liberia and the Religious Dimension of an African Civil War, New York University Press, New York, NY.

Galperin, H. (2004), "Beyond interests, ideas, and technology: an institutional approach to communication and information policy", *The Information Society*, Vol. 20, pp. 159-68.

Government of Liberia (GoL) (2005), National Telecommunications Policy and Strategy: a Telecom Sector Policy Document, Ministry of Post and Telecommunications, Government of Liberia, Monrovia.

Government of Liberia (GoL) (2008), "Telecommunications/ICT policy", Draft, Monrovia, Liberia, Ministry of Post and Telecommunications, Government of Liberia.

Grindle, M.S. and Thomas, J.W. (1991), *Public Choices and Policy Change: The Political Economy of Reform in Developing Countries*, Johns Hopkins University Press, Baltimore, MD.

International Bank for Reconstruction and Development (IBRD) (2005), *Liberia Telecommunications Sector Overview of Issues and Roadmap for Reform*, The World Bank, Washington, DC.

International Bank for Reconstruction and Development (IBRD) (2007), World Development Indicators 2007, The World Bank, Washington, DC.

International Monetary Fund (IMF) (2008), Liberia: Enhanced Initiative for Heavily Indebted Poor Countries – Decision Point Document, Debt Sustainability Analysis, and Staff Supplement, International Monetary Fund, Washington, DC.

International Telecommunication Union (ITU) (2007), World Telecommunication/ICT Indicators Database, International Telecommunications Union, Geneva.

Kalu, K.A. (Ed.) (2004), Agenda Setting and Public Policy in Africa, Ashgate, Aldershot.

Kingdon, J.W. (1995), Agendas, Alternatives, and Public Policies, Longman, New York, NY.

Macrae, J., Zwi, A. and Forsythe, V. (1995), "Aid policy in transition: a preliminary analysis of "post" conflict rehabilitation of the health sector", *Journal of International Development*, Vol. 7, pp. 669-84.

Macrae, J., Zwi, A. and Gilson, L. (1996), "A triple burden for health sector reform: 'post'-conflict rehabilitation in Uganda", *Social Science and Medicine*, Vol. 42, pp. 1095-110.

Mintrom, M. and Vergari, S. (1998), "Policy networks and innovation diffusion: the case of state education reforms", *The Journal of Politics*, Vol. 60, pp. 126-48.

Monge, M. (2006), "The crucial contribution of parliaments to post-conflict economic recovery (including PRSP and MDGs) – Timor-Leste as a case-study", International Conference On Parliaments, Crisis Prevention And Recovery, UNDP – Government of Belgium, Brussels, Belgium.

Ndukwe, E. (2005), "Country experience in telecoms market reforms – Nigeria", available at: www.ncc. gov.ng/speeches_presentations/EVC's%20Presentation/Country%20Experience%20with%20Market%20Reforms%20in%20Telecoms%20%20-%20060705.pdf (accessed 18 December 2008).

New Democrat (2008), "Liberians spend more on scratchcards than on food", New Democrat, p. 3, Monrovia, Liberia, 13 May.

Ostrom, E. (2005), Understanding Institutional Diversity, Princeton University Press, Princeton, NJ.

Ostrom, E., Gardner, R. and Walker, J. (1994), *Rules, Games, and Common-pool Resources*, University of Michigan Press, Ann Arbor, MI.

Radelet, S. (2007), "Reviving economic growth in Liberia", working paper, No. 133, Center for Global Development, Washington, DC.

Sabatier, P.A. (2007), Theories of the Policy Process, Westview Press, Boulder, CO.

Sabatier, P.A. and Jenkins-Smith, H.C. (1999), "The advocacy coalition framework: an assessment", in Sabatier, P.A. (Ed.), *Theories of the Policy Process*, Westview Press, Boulder, CO.

Sawyer, A. (2005), *Beyond Plunder: Toward Democratic Governance in Liberia*, L. Rienner Publishers, Boulder. CO.

Sesay, M.A. (1996), "Politics and society in post-war Liberia", *Journal of Modern African Studies*, Vol. 34, pp. 395-420.

Stone, D. (2001), "Learning lessons, policy transfer and the international diffusion of policy ideas", Centre for the Study of Globalisation and Regionalisation working paper 69/01, pp. 1-41.

Stone, D.A. (2002), *Policy Paradox: The Art of Political Decision Making*, W.W. Norton & Co., New York, NY.

Thakur, D., Best, M.L. and Jones, K. (2007), "Regulatory independence and the development of the telecommunications sector: the Liberian Telecommunications Authority", available at: http://mikeb.inta.gatech.edu/uploads/papers/lta.pdf (accessed 18 December 2008).

True, J. and Mintrom, M. (2001), "Transnational networks and policy diffusion: the case of gender mainstreaming", *International Studies Quarterly*, Vol. 45, pp. 27-57.

Uvin, P. (2001), "Difficult choices in the new postconflict agenda: the international community in Rwanda after the genocide", *Third World Quarterly*, Vol. 22, pp. 177-89.

World Health Organization (WHO) (2000), Reproductive Health During Conflict and Displacement, World Health Organization, Geneva.

Corresponding author

Michael L. Best can be contacted at: mikeb@cc.gatech.edu