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Telecommunications Reform In Southern Africa: The Role Of The Southern African Development Community

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Telecommunications reform in Southern Africa: the role of the Southern African Development Community

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Abstract   This article examines telecommunications reform and related infrastructure and service developments in Southern African states. In focusing on this region, the article analyses the role of the Southern African Development Community (SADC) and the different associations and commissions it has created to develop the telecommunications sector and facilitate reform, which is essential to promote network efficiencies and extend the infrastructure to rural areas. As a regional organisation, SADC is poised to promote restructuring of the telecommunications sector in its 14 member states, as it seeks to achieve complementary national and regional programs and promote sustainable development and economic growth through regional integration.

Keywords   Africa, Telecommunications, Reform, Regulation, Policy

INTRODUCTION

Although privatisation and reform of the telecommunications sector have diffused rapidly internationally, Africa has yet to fully engage in this policy diffusion process. Reform of the sector is essential, however, to promote network efficiencies and extend the infrastructure to rural areas. This article examines telecommunications reform and related infrastructure and service developments in Southern African states. This geographical area is particularly important since it represents a significant growing market for international trade and investment, offering an abundant supply of natural resources, a population of some 200 million people, and a combined GDP in excess of US$175 billion (Nzo, 1999, p. 7). In focusing on this region, this article analyses the role of the Southern African Development Community (SADC) in facilitating telecommunications reform and development of the sector. As a regional organisation, SADC is poised to promote reform of the telecommunications sector in its member states, as it seeks to achieve complementary national and regional programs and promote sustainable development and economic growth through regional integration. To remedy this situation, the African Telecommunications Union (ATU) has articulated its mission to effectively promote the rapid development of information communications technologies in Africa in order to achieve universal access and full inter-country connectivity (African Telecommunications Union (ATU), 1999). The ATU is not only cognizant of the vital role the telecommunications sector plays in promoting socio-economic development, but it also recognizes the need to develop telecommunications networks and services in a concerted, planned and integrated manner (African Telecommunications Union (ATU), 1999). The potential for cooperation between states is arguably highest when the issue at stake reinforces an interdependent relationship among the states involved, so collaboration on an issue-specific area, such as telecommunications, may offer better potential for success than macro-level schemes (Akinyemi, 2001). This article thus examines the organisational structure and strategic plans of the ATU, as well as the challenges it faces in achieving its goals and objectives to facilitate telecommunications policy reform and related infrastructure and service developments in its member states. This article assesses the efforts of the ATU for it is important that this continental organisation, in its various endeavours, actually achieves tangible results and is not merely a Pan-African paper tiger.

METHODOLOGY

This work employs the case study, which draws upon multiple data sources to develop converging lines of inquiry or triangulation when investigating a specific, contemporary phenomenon. This study, based on field work conducted in Botswana and Mozambique in the summer of 2000, draws on three primary sources of evidence: documentation, archival records, and elite interviews. Documentation sources include, among other references, policy and legal documents from the Southern Africa Transport and Communications Commission (SATCC), the Telecommunications Regulators Association of Southern Africa (TRASA), and the Southern Africa Telecommunications Association (SATA). In the process of gathering data, interviews were conducted with officials of SATCC, the executive chairman of TRASA, as well as others intimately involved with the telecommunications sector in the Southern African region. These interviews, while open-ended in nature, followed a specific set of questions concerning telecommunications policy and infrastructure developments in SADC.

SADC

Heads of State signed the Declaration and Treaty establishing the Southern African Development Community or SADC in Windhoek, Namibia in August 1992. It essentially replaced the Southern African Development Coordinator Conference (SADCC), which had been created in April 1980 by nine founding states, Angola, Botswana, Lesotho, Malawi, Mozambique, Swaziland, Tanzania, Zambia and Zimbabwe. These majority-ruled, frontline states united in a struggle against colonialism and apartheid. SADCC member states, inextricably linked and dependent upon the Republic of South Africa, sought to simultaneously liberate and integrate their national economies. In view of recent, significant socio-economic and political changes taking place within the region, notably the end of an era of apartheid, the states have sought to strengthen SADCC and grant it greater legal status and powers, hence the evolution of SADC. The organisation currently comprises 14 states, in addition to the nine founding states, the five most recent members include Namibia and the Republic of South Africa, which joined in 1990 and 1994 respectively, Mauritius, which joined in 1995, followed, in 1997, by the Seychelles and the Democratic Republic of the Congo (DRC). The DRC may seem an odd addition to the regional organisation, but South Africa lobbied heavily for its inclusion, in large part due to mining interests in the state. Although the internal politics of SADC are beyond the perusal of this article, it is nonetheless important to consider South Africa's incomparable economic influence in the region.

South African dominance

Regional organisations must not be constructed, according to Amin (1997, p. 105), by attaching peripheral countries or zones to dominant centres which serve as global or regional colonialists, as in creating a yen zone with Japan and South-East Asia or attaching Mexico to the United States and Canada in the North American Free Trade Agreement (NAFTA) or subjecting Southern African states to the power wielded by South Africa. In regard to the communications arena, as in other spheres of economic activity, South Africa looks to expand its reach in Africa. South Africa boasts sub-regional ambitions, seeking, as Wilson (1996, p. 4) writes, to route international telephony traffic originating in SADC member states through its own system. As the Internet capital of the African continent, users in other SADC states have previously had to connect to a South African Internet Service Provider (ISP) via an international dial-up connection. While telecommunications links between neighbouring Southern African states are insufficient, the countries in the region each maintain direct links, and with few exceptions, digital links, to South Africa (SATCC-TU, 1996–1997, p. 144). Furthermore, Vodocom, the primary cellular service provider in South Africa, also seeks to secure licences to operate in other SADC states.

In the development of regional monetary and financial institutions, which Amin (1997, p. 52) suggests must be developed as substitutes for the

IMF for securing capital, it is more likely in the case of Southern Africa that the South African rand will play a preeminent role and either be adopted as the regional currency or be the primary measure to which a currency is pegged. For example, Botswana's currency, the pula, is pegged to a basket of currencies, 60 percent of which is dominated by the weighting of the South African rand. To maintain the competitiveness of manufactured exports to South Africa, Siddiqi (1999, p. 7) writes, the rand will continue to be targeted by Botswana's central bank's exchange rate policies. Botswana must also diversify its trading partners for, like other countries in the region, it is highly dependent on the Republic of South Africa. In 1999 a downturn in the South African economy adversely affected Botswana's economic health, particularly in regard to automobile production—approximately 95 percent of vehicles assembled in Botswana are exported to South Africa and some 70 percent of consumer imports are from South Africa (Siddiqi, p. 7).

With an economy more than three times the size of all other SADC member states' economies combined, South Africa's economic dominance in the region was duly noted by SADC before its admission to the organisation (SADC, 1993, p. 27). Countervailing measures have not, however, been sufficiently enacted to prevent further economic polarisation, though efforts are being made to restructure regional relationships with a view to balanced economic growth and development and political stability and security. SADC seeks to require that the stronger or more endowed states assist and compensate the weaker members to ensure that they too benefit from the opportunities afforded by regional integration (SADC, 1993, p. 6).

The integration process and SADC treaty

Amin (1999, pp. 22 and 91) contends that since no economy exists without politics and a state, economic globalisation logically requires the construction of a world political system of which regional entities are necessary transitional steps. SADC thus assumes increased importance in this present era, which is characterised by a separa-

tion between the globalised space of capitalism's economic management and the national, and regional, spaces of its political and social management (Amin, 1997, p. 32). SADC recognizes that regional co-operation impacts national sovereignty in that member states need to accept that some decisions, previously made at the individual level, will be taken collectively through regional institutions and will be binding on all. Further, those decisions taken nationally will have to take into account regional positions and circumstances (SADC, 1993, p. 6). In the process of integration, though, it is important for SADC to maintain a degree of flexibility so as to allow member states to proceed at different paces. To be an effective regional organisation, Amin (1999, p. 54) argues that regional economic integration requires corresponding political integration and the rapprochement of national policies.

While SADC is not an embryo of a confederal organisation, which Amin (1999, p. 54) suggests should be established post-haste, its Treaty assumed the force of national laws upon ratification by the member states in September 1993. Under this legally binding arrangement, the member countries are to coordinate, harmonise, and rationalise their policies and strategies for sustainable development (http://www.zuidafrika.nl/politics/sadc/treaty.html). The primary role of SADC is to define regional priorities, facilitate integration, assist in mobilizing resources and maximize the regional impact of projects. The Treaty also provides for protocols, which establish the principles and procedures under which the countries are to conduct their cooperation in specific areas.

Each member state has been allocated a sector for which it is responsible to propose policies and coordinate projects. For example, Namibia is responsible for Marine Fisheries and Resources, South Africa for Finance and Investment, and Mozambique for Transport and Communications. Maputo, the capital of Mozambique, is the headquarters of the Southern Africa Transport and Communications Commission (SATCC), which was established in July 1981 as the first Commission of the SADCC. Given the disparate size and level of development of the member states of

SADC, a regional approach to telecommunications offers the advantage of economies of scale. The transportation and telecommunications sectors are at the heart of a competitive Southern Africa and nearly half of SADC's 400 development projects are concerned with building an effective transportation and communications network (http://www.sadc-usa.net/reference/reports/transport.html).

STRATEGIC IMPORTANCE OF THE TELECOMMUNICATIONS SECTOR

SADC is cognizant of the vital role the telecommunications sector plays in promoting socio-economic development. Both case studies and statistical analyses have indicated a strong correlation between telephone penetration rates and GNP per capita. The telecommunications sector is decisive in enabling countries to achieve socio-economic goals as well as compete in the international economy, since effective use of electronic communication permits improved coordination and configuration of goods and services. The telecommunications network is arguably the most fundamental infrastructure with a pervasive effect on the performance of an economy. The telecommunications sector is unique when compared to other sectors or firms, for its infrastructure serves as a platform and a catalyst for other industries, facilitating integration in the economy. It is an essential factor, a requisite for most businesses, especially foreign firms considering investment in a state. As SADC states modernize their economies, emphasis is placed on upgrading the telecommunications infrastructure.

A reliable and comprehensive, regional telecommunications network, SADC recognizes, is a requisite component of both the quest for sustainable development and economic growth and the process of regional integration. A deficient telecommunications system can be considered the foremost non-tariff barrier to intra- and extra-SADC trade. The region, however, suffers from low-quality telecommunications services. Several factors contribute to the poor state of the telecommunications sector, notably, institutional inefficiency, inadequate human resources, and maintenance problems that derive from an absence of common operating standards, proper maintenance procedures, and standardized equipment. Donor-established equipment standards have made the synchronization of cross-border communications difficult to achieve. In addition, the telecommunications links that presently exist between neighbouring SADC states are used to capacity, resulting in traffic congestion, and extending these would mean a capital investment that most of the countries cannot afford.

The telecommunications network, furthermore, does not sufficiently extend to rural areas in individual member states. According to a report prepared by PriceWaterhouseCoopers (1998, p. 3), one-half of the SADC states have a teledensity below one, and of the remaining countries only two, South Africa and Mauritius, have teledensities greater than 10, and these figures generally represent telephone line installations in large population centres or urban areas. To achieve sustainable development it is imperative that people, who do not live in the capital cities, but in rural areas, are provided with telecommunication services. As most SADC states can ill afford to invest in the expansion of fixed line services, mobile services, which carry relatively lower fixed network costs than wire line networks, especially in low density areas, offer a viable option to increase the telephone penetration or teledensity rate and facilitate regional integration.

Reform of the sector is, however, obligatory as a state introduces cellular and Internet services. In promoting these services a state is essentially endorsing competition with the fixed line operators, which to date, remain state owned entities in all of the SADC states, except South Africa, where it is majority owned. Telecommunication policies and legislation that often discourage private sector initiatives, and thus serve as further impediments to the growth of cellular and Internet service providers are gradually being changed. This is imperative if Southern Africa is to fully emerge as a globally competitive regional economy. Regional initiatives undertaken by the Southern Africa Transport and Communica-

tions Commission Technical Unit (SATCC-TU), the Secretariat supporting the SATCC, are designed to create a more liberal and competitive telecommunications sector that allows, if not mandates, a greater role for the private sector.

SADC PROTOCOL ON TRANSPORT, COMMUNICATIONS AND METEOROLOGY

In an initial effort toward reform, the SATCC-TU drafted the SADC Protocol on Transport, Communications and Meteorology, which was adopted by SADC Heads of State in 1996. The objectives of the Protocol, according to Article 10.1, are to:

a) ensure adequate high quality and efficient services responsive to the diverse needs of commerce and industry in support of regional social and economic growth;

b) achieve regional universal service with regard to telecommunications services and regional universal access to advanced information services; and

c) enhance service interconnectivity in the region and globally (SATCC-TU, 1998, p. 51).

In order to achieve these objectives, Article 10.2 states that the "Member States agree to develop a harmonized regional telecommunications policy aimed at … the economic and institutional restructuring of telecommunications in a phased and co-ordinated manner" (SATCC-TU, 1998, p. 51). Further, in accord with Article 10.5, member states are to encourage "private sector investment in network provision and maintenance" (SATCC-TU, 1998, p. 53). In regard to regulatory issues, Article 10.7 states that member states shall "establish autonomous, independent and national regulatory bodies which shall have statutory authority to regulate and monitor specified telecommunications-related activities in the respective Member States" (SATCC-TU, 1998, p. 54). Article 10.8 then outlines the specific responsibilities of the national regulatory bodies. In

recognition of the importance of a regional network, member states are also, according to Article 10.9, to ensure "the interconnectivity of telecommunications networks and the interoperability of telecommunications services in the region … [through] harmonized technical standards for network architecture and equipment" (SATCC-TU, 1998, p. 55). In June 1998 SADC, in pursuance of the provisions of the Protocol, approved regional telecommunication policies and a Model Telecommunication Bill.

REGIONAL TELECOMMUNICATION POLICIES

The objectives of the SADC policies, among others, are to provide affordable, efficient and high quality telecommunications services and create partnerships and an environment for sustainable info-communications development. The goal is to create a tripartite industry framework with the respective Government as the policy maker, an independent regulatory institution, and licensed service providers operating in a competitive environment overseen by appropriate legislation. The policies address in detail tariffs, interconnection agreements, the frequency spectrum, the role of the regulator, and universal service.

SADC member states face numerous challenges in developing and restructuring the telecommunications sector, but perhaps none so daunting as providing services to rural and other underserved areas. The high cost of extending wire-line networks across difficult terrain to a dispersed, low-income subscriber base generating low-volume usage, contributes to a low rate of return on investment. This financially unattractive situation for foreign investors and the national service provider in regard to developing fixed line networks in rural areas can be resolved in part by employing cellular and satellite services. In SADC's aim for states to create competitive, multi-operator telecommunications markets, it is vital that governments determine the mechanism that they will institute to finance universal service, be it a condition of the operating license, a set sum to be paid into a universal service fund, and/or a transparent government subsidy fi-

nanced from tax revenues. The policies do not stipulate which specific mechanism or combination thereof states are to employ, but stress that the provision of universal service or access is one of its most important objectives.

The policies, in recognizing that telecommunications reform is a gradual, step-by-step process, suggest a sequence of restructuring activities:

- Incorporating the dominant state owned telecommunication enterprise (SOTE).

- Liberalising value added and other non-basic services.

- Sale of Minority shares in the SOTE with exclusivity in fixed voice services for limited period of time.

- Sale of majority shares.

- Removal of exclusivity and opening all services to competition.

- Sale of all shares retaining only a golden share (SATCC-TU, 1999, p. 30)

SADC states have made progress in relation to this succession of reforms. Until recently most governments operated a single post and telecommunications service that integrated regulatory functions with operational and decision making functions. The initial task of separating the postal services and the telecommunication services, and thus creating distinct entities, has been completed in every SADC member state. All of the public telephone operators or PTOs have been transformed into public corporations or companies, which are expected to operate profitably and to respond more flexibly to customer demands. The next step, privatisation of the sector, has proven more difficult for states to enact. Since divestment usually involves the participation of a foreign investor, its implementation presents a quandary for many African states, which are trying to develop a national identity and political and economic independence as a nation-state. This dilemma accounts in part for the re-

luctance of Southern African states to embrace privatisation. Among SADC states, only South Africa has privatised its PTO to date and the government, as noted, remains the majority shareholder. Most states are, however, introducing competition in the sector via cellular operators. All of the licensed service providers are then to operate in an environment overseen by an independent regulatory authority. The establishment of an independent regulatory authority and its duties and powers are the focus of the SADC Model Telecommunication Bill.

MODEL TELECOMMUNICATION BILL

The Bill is "an Act to provide for the restructuring and the development of telecommunications, establish an autonomous and independent regulatory authority, [and] license the providers of telecommunications services" (SATCC-TU, 1999, p. 65). The Bill, like the regional policies, were developed through several meetings of experts and stakeholders and endorsed by the relevant SADC structures. The SATCC Committee of Ministers approved the Model Telecommunications Bill as a guideline in formulating national legislation (SATCC-TU, 1999, p. 60). The member states agreed to create regulatory agencies as independent of the Ministry as legally possible with a Board representing a broad cross-section of the population so as to ensure that the domestic users of telecommunications services would be represented (SATCC-TU, 1999, p. 72). While the Bill has not been enacted verbatim in member states, in parallel with the transformation of PTOs to public corporations, many governments, including that of Angola, Botswana, Malawi, Mauritius, Mozambique, Namibia, South Africa, Tanzania, and Zambia, have created an independent regulatory agency.

In this endeavour and in accord with Part XI of the Bill concerning the restructuring of the incumbent national operator, the governments have passed legislation that abolishes the PTO's monopoly in the provision of telecommunication services and terminates its ability to prescribe the tariffs at which it provides telecommunications services and its powers to make by-laws and reg-

ulation. The regulatory authority, a body corporate with a common seal, capable of being sued and suing, is generally charged with a variety of responsibilities. These responsibilities include the issuing of service licenses, systems licenses and radio licenses; the issuing of regulations governing the industry; spectrum management; type-approval of telecommunications equipment and systems; issuing of tariff guidelines and approval of tariffs; and the settling of disputes among stakeholders. Further, SADC considers that the cost of regulating the industry should be borne by the industry itself as much as possible by levying fees and charges for the licensing of operators and equipment that reflect the real cost of providing the services. To promote regional integration and economic development, all SADC member states have been urged to expeditiously create independent regulatory agencies and adopt other aspects of the Model Telecommunications Bill and telecommunication policies and submit to the SATCC-TU their respective time schedules for national implementation. In an effort to bridge the gap between the formulation of regional legislation and policies and effective execution at the national level, SADC created the Telecommunications Regulators Association of Southern Africa (TRASA).

TRASA

TRASA was formed in conjunction with Article 13.13 of the *Protocol*, which states:

1. The Governments of Member States shall promote the creation of regional bodies where required to provide a framework for collaboration and inter-action between and amongst service providers, users, regulators, labour and other stakeholders to participate as equal partners in the process of implementation of this Protocol.

2. Member States shall co-operate with regional bodies established within a sector or sub-sector (SATCC-TU, 1998, pp. 76–77).

As the fixed line monopoly service providers lose their regulatory powers with the creation of independent regulatory agencies, the creation of TRASA was considered essential to facilitate regional telecommunications reform and enhance service provision. TRASA's principle goals are to increase communications and coordination between the region's regulatory authorities and encourage investment in the telecommunications sector by supporting the creation of a common enabling environment, such as in regard to regulation and taxation for the SADC region. Additionally, TRASA seeks to standardise the allocation of radio frequencies and equipment and operating standards and develop the requisite human capital to provide cost-effective services throughout the region (Gullish, 1999, p. 3).

The original signatories to the TRASA Constitution, which became effective on April 22, 1998, are Botswana, Mozambique, Namibia, South Africa, Tanzania and Zambia. Membership in TRASA is contingent upon a country's law providing for the establishment of an autonomous regulatory authority. Angola, Malawi, and Mauritius have since created independent regulators, so that currently more than half of SADC member states are in compliance and members of TRASA and other states, namely Lesotho and Zimbabwe, are in the process of creating regulatory agencies. Countries, which do not possess independent regulators, can participate in the activities of TRASA, but do not have voting rights (SATCC, 1999, p. 1). Members share the cost of operating TRASA equally (TRASA, 1997, p. 7). According to Article 3 of the TRASA Constitution, the objectives of the organisation are to "coordinate regulatory matters and … promote the establishment and operation of efficient, adequate, and cost-effective telecommunications networks and services in the Southern Africa region which meet the diverse needs of customers while being economically sustainable" (TRASA, 1997, p. 4).

While the success of this regional organisation as well as the newly created national regulatory agencies is too early to assess, TRASA can potentially serve as a model for a Pan-African regulatory association. Some hope that TRASA

would evolve into a supra-national regulatory agency. While no such organisation exists, TRASA's evolution into such could resolve national sovereignty issues, though it is arguable as to whose best interests this would serve, meaning that the regulatory organisation must indeed be mindful in facilitating private investment in the telecommunications sector. As Amin (1997, p. 97) notes, the merits of economic liberalism and, by extension, telecommunications privatisation, are extolled in the name of 'transparency', with the state regarded as the locus of opacity. This position not only flouts the fact that the democratic state provides the optimal conditions for transparency, but also utterly disregards the absolute opacity of private companies and corporations protected by the rubric of "business confidentiality" and proprietorship. Extending this critical line of reasoning is to suggest the necessity of a strong regulator to ensure that universal service or access and other social obligations are met. Amin's point does not negate the need to restructure the telecommunications sector, but raises important issues to consider, matters to be addressed by TRASA as well as the Southern Africa Telecommunications Association (SATA), an organisation comprised of the region's telecommunications operators, which prior to the creation of TRASA, also discussed regional regulatory issues.

SATA

SATA, which was established in 1981 as a forum for the essentially self-regulating operating entities, is currently being restructured. In 1996 SATA adopted an interim structure that was to last a maximum of three years, after which two separate regional bodies, one for regulators (TRASA) and one for operators, were to be created; however, during its April 1997 annual conference, SATA agreed to divide immediately into these two associations (SATCC-TU, 1996–1997, p. 163). SATA revised its constitution to reflect its new role and responsibilities.

Among the principal objectives of SATA, stated in Article 3 of the SATA Constitution, the regional association shall "[e]ncourage techno-

logical and business co-operation amongst Members; [f]acilitate beneficial access to innovative technologies …; and [e]ncourage co-operation … in training and human resource development" (SATA, 1999, pp. 4–5). According to Article 5, membership is limited to the public telecommunications service providers of each SADC member state, though representatives of service users, service providers, equipment suppliers and manufacturers are to be invited to speak at SATA's Annual Conference and thus contribute to the association's deliberations on various issues (SATA, 1999, p. 8). SATA is also open to private service providers, namely cellular operators, joining the organisation, but to date none have done so, despite their increasing presence and influence.

CELLULAR AND INTERNET SERVICES

There has been a rapid growth of mobile operators, which often comprise an international investor with a local partner, in Southern Africa and the continent as a whole. Cellular telephony has proliferated from a presence in only six African countries in 1990 to some 78 networks in 42 countries by 1999 (Offei-Ansah, 1999, p. 6). Among SADC member states, there is a general agreement to adopt the Global System Mobile (GSM) standard for mobile cellular telephony networks to in order to allow roaming within the region. Although most cellular operators provide access mainly in the capital cities, many are also extending services to secondary towns and villages along major trunk routes. In light of the ease at which wireless networks can be deployed, wireless communications can improve access to those people living in rural and underserved areas, which represent the majority of the populace in African states. The economic and social improvements or advantages accredited to wireless telephony and Internet access are wide-ranging. According to an article in *The Botswana Guardian* (2000, p. 31), the International Telecommunications Union has identified mobile or cellular telephony as the technology most suitable to help African and other developing countries to move into the information society and promote the pro-

cess of development because of the faster roll out rates or construction period. Mobile communications are also preferred to fixed line terrestrial systems in environments that boast a sparse population and rugged, inhospitable terrain, which is characteristic of many Southern African states.

Botswana is a case in point. It comprises a small population of some 1.5 million people scattered across a semi-arid terrain of more than 580,000 km2. In 1999 after some 20 years in operation, the Botswana Telecommunications Corporation (BTC), a state-owned monopoly provider of fixed line telecommunications services, finally reached 100,000 customer access lines. In early 1998 the government awarded two licenses to the country's first cellular operators, one of which, Mascom Wireless, owned in large part by Portuguese Telecom, achieved a customer base of more than 100,000 in 28 months and will soon surpass the fixed line operator in terms of its subscriber base. In fact, the combined customer base of the two cellular companies, the other being Vista, a joint venture with France Telecom, does exceed that of the state owned monopoly, BTC. This phenomenal growth surpassed the projections of its initial business plans, notes Chief Executive Officer of Mascom, Luciana P. da Costa (personal communication, July 6, 2000) and is due in large part to the introduction of prepaid services. This exponential development of cellular operations is testimony to the demand for telephony services.

This demand is also reflected in Internet service offerings. Although the Internet is as of yet an essentially insignificant medium in Africa with access limited to some 0.1 percent of the population, the number of host sites on the continent has proliferated in recent years (Kenny, 2000, p. 25). Only 11 of Africa's 54 countries had local Internet access at the end of 1996, but by February 2000 all of the countries had secured access, at least in their capital cities, according to an article in the *Wilson Quarterly* (2000, p. 122). The Southern Africa Regional Telecommunications Restructuring Program reports in *Southern Africa Telecom Quarterly* (1996, p. 6) that more than half of the SADC countries now have "full" Internet connectivity, meaning they have access to the complete array of Internet services available, as well as access to dedicated Internet connections via leased lines. Leased line connections are costly and the waiting time for connection can be lengthy, nonetheless, they may be preferable since standard connections are slow and unreliable due to the state of network development. The inadequate state of the fixed line telecommunications network is effectively a bottleneck for the expansion of Internet access. While wireless Internet offerings may assist in overcoming this barrier, other hurdles remain, including a shortage of technical and managerial expertise, the high cost of both the telephone connection to the ISP and the ISP itself, an insufficient electricity supply, and the need to improve literacy rates as well as to provide computer training and computers themselves. At the household and small business level access to personal computers is severely limited in the region. While reform of the telecommunications sector can assist in addressing some of these issues, to fully attend to all of these issues, a forward-thinking and integrated approach to development on behalf of SADC as well as development agencies is mandatory, though as of yet has not been forthcoming.

USAID-RTRP

Assistance from the United States Agency for International Development (USAID) has, however, facilitated the telecommunications reform process in Southern Africa. The USAID Regional Telecommunications Reform Program (RTRP), which operated in the region from 1994 to 1999, was contracted to PriceWaterhouseCoopers. The project provided management and technical education to operators, regulators, ministers, and others involved with the telecommunications sector in Southern Africa. The emphasis of the RTR program, after an initial failure to showcase Zambia as an example of telecommunications privatisation and thereby encourage divestment in the region, was to establish and build independent regulatory agencies and facilitate the formulation of clear policies and legislation regarding the sector. Law firms in Washington, DC

were contracted to provide legal assistance to SADC in drafting the Model Telecommunications Bill and assist individual member states in writing their country's legislation. From the perspective of USAID, the RTR program can be considered successful in that it actually affected the legislation of many states as countries passed laws to liberalize the telecommunications sector and introduced mobile communications services.

The RTR program aimed to promote not simply private, but notably US business interests in the telecommunications sector in Southern Africa, as it increased US companies' access to information and business opportunities in the region. US telecommunications exports to the region have increased for each consecutive year since 1994. The Southern Africa Regional Telecommunications Restructuring Program reports in *Southern Africa Telecom Quarterly* (1999, p. 1) that, according to a Commerce Department report, in 1997 six SADC countries imported approximately US$95 million in telecommunications equipment, with South Africa accounting for the lion's share with US$64 million. This same article (1999, p. 1) states that exports to South Africa doubled to US$133 million in 1998, which represents more than half of the value of US telecommunications exports to sub-Saharan Africa for 1998, which was US$206 million, an increase of 39%.

The RTR project aimed to create an enabling environment for private investment. While this goal assists capitalism's expansion and may claim indirect benefits for citizens of SADC, it should not be confused with development. Development emphasises the orientation of production towards basic needs, the orientation of distribution and services towards the poor majority, the incorporation of a social dimension into technological research and innovation, and popular participation in a democratic system. PriceWaterhouseCoopers is not a development agency, hence the goal of development, that is, the improvement of society through strong economic growth, accompanied by full employment and income distribution favouring the popular classes, has not been clearly identified as part of the RTRP agenda. Development of the periphery is

not a goal of capital's strategies, for not only does capitalism reduce citizens to consumers, but dominant capital also finds it profitable to manage the Third World debt (Amin, 1997, pp. 34 and 40). Debt forgiveness could undoubtedly assist in arresting the further marginalisation or fourth worldisation of Africa, as would aid conditionality based on respect for individuality, political democracy, and progressive social policies, such as environmental conservation (Amin, 1997, p. 41). As a regional organisation, SADC should strive to influence aid conditionality and negotiations between bilateral and multilateral lending institutions and member states in this direction.

CONCLUSIONS

The welfare of the people of Southern Africa and the development of an integrated regional economy requires concerted and higher levels of coordinated regional institutions and actions. In the process of promoting intra-regional trade and supporting industrial development and growth, the upgrading and development of the telecommunications sector must remain a priority. All SADC member states are engaged in a process of phased liberalisation of the telecommunications sector. They each are at varying stages of restructuring their telecommunication organisations in order to increase efficiency and create effective independent regulators. Despite the differences in the pace at which SADC states are implementing the Model Telecommunications Bill and regional telecommunications policies, one overarching trend is apparent, that is, the SADC governments are undertaking ambitious initiatives to reform the telecommunications sector. The creation of a strong, independent regulator has been deemed necessary by SADC states to oversee well-structured private–public partnerships, which can together provide the resources to build a regional telecommunications infrastructure, as evidenced by joint ventures in the cellular market.

Unprecedented growth in the cellular sector is increasing the telephone penetration rate, but SADC has a regional average of only 3.4 direct exchange lines or dels per 100 inhabitants. According to the SATCC-TU (1997, p. 153), a

teledensity of 25–30 dels per 100 persons is required to support the socio-economic activities of a nation that can be viewed as having "taken off" in its transformation into a modern economy. In the process of closing this titanic gap, it is important, however, for SADC member states to avoid a pattern of industrialisation, which Amin (1997, p. 148) describes as resembling a gigantic sub-contracting enterprise controlled from countries at the centre of the system, as in the case of countries in East Asia and Latin America which now manufacture products that are competitive on the world market. Structural adjustment or reform at the national or, in the case of SADC, at the regional level without a structural alteration of the international economy is destined to fail, but SADC can perhaps avoid some of the economic entrapments made in the name of development. Certainly SADC states want to escape their role as exporters of raw materials, but not to find themselves caught in some other guise of peripheral capitalism. Restructuring of the telecommunications sector may assist in this endeavour, so long as humanitarian development is the key goal.

Although telecommunications reform raises a host of complex issues, SADC is addressing these as it seeks to improve the economic and social well being of its population and integrate the member States into a single whole. The creation of TRASA is evidence of this, for it offers the region's regulators an opportunity to cooperate in not only regional, but also continental efforts to address issues pertaining to the telecommunications sector. While the *Protocol* serves as an excellent guide for countries undertaking reform, the implementation framework is ambiguous and both TRASA and the SATCC need to be entrusted with the means of enforcement. It would furthermore be advisable for the SATCC, which is largely transport-driven, to be split into two distinct authorities, one for transportation and another for telecommunications. Also, since the activities of the SATCC have been largely funded through external donors, including foreign consultants, the future viability of the organisation depends on the degree to which the institution can be financially self-sustaining and boast greater in-house expertise. Although SATCC was instrumental in the institutional development of TRASA, it must be more than a vehicle for information exchange and a lobbyist of reform. To facilitate the work of TRASA and SATCC and be a truly effective regional organisation, SADC must not only implement measures to bridge widening intra-regional economic gaps and reduce the dependency of member states on South Africa, it must take every conceivable action to foster economic and political integration. It must be charged with the powers, legal and resource-wise, to enforce regional policies at the national level until in fact the nation-states dissolve into one.

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