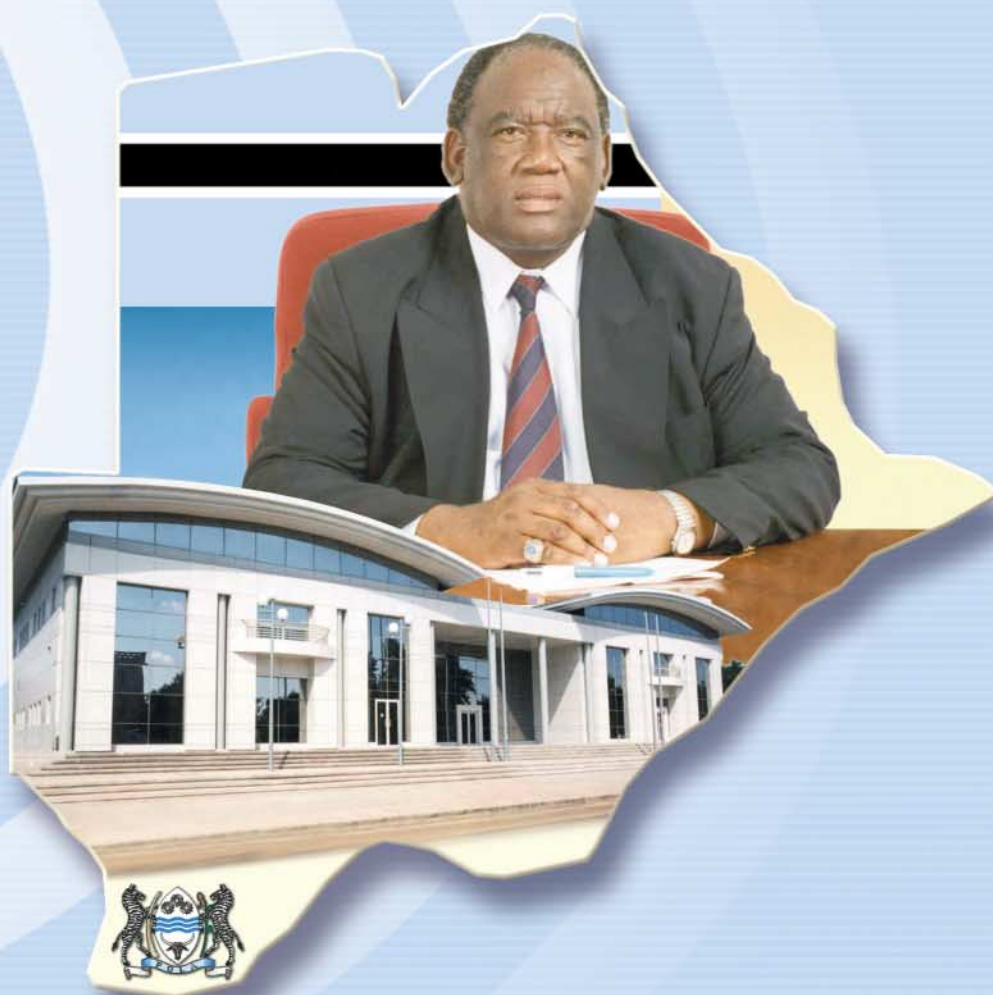


**EFFECTIVE REGULATION
CASE STUDY:**

**BOTSWANA
2001**



International Telecommunication Union



**The Botswana Telecommunications Authority (BTA) and
The Telecommunications Regulators' Association
of Southern Africa (TRASA)**

Effective regulation

Case study: Botswana

**A Case Study on Effective Regulation in Sub-Saharan Africa
and Regional Cooperation**



International Telecommunication Union

This case study was conducted by Susan Schorr and Nancy Sundberg of the ITU/BDT.

The report is based on field research undertaken in Gaborone, Botswana from 9-12 July 2001, as well as reports and articles identified in footnotes. A list of persons and organizations met during the field research is contained in Annex B.

The field study enabled us to meet and interview the regulatory agency as well as government and industry. This study is concerned chiefly with institutional considerations, the structure, the operation, the financing and the legitimacy in the marketplace of the Botswana Telecommunications Authority (BTA), the regulatory agency. This study is intended to be useful not only to the regulatory authorities and the corresponding arms of government, but also to everyone concerned with the telecommunication market.

The authors wish to express their sincere appreciation to BTA for supporting this study, and wish particularly to thank Mr M.C. Lekaukau, Mr T. B. Koontse and Mr M. O. Tamasiga for their invaluable assistance, as well as everyone in the public and private sectors alike that gave us their time. Without their support a report such as this could not have been prepared. The authors also wish to express their sincere appreciation to Mr B. Goulden for his invaluable information on the founding of the Telecommunication Regulators' Association of Southern Africa (TRASASA).

The views expressed are those of the authors and may not necessarily reflect the opinions of the ITU, its members, or the Government of Botswana.

This case study is one of five case studies on Effective Regulation. Additional information can be found on the web site of the BDT's Sector Reform Unit <http://www.itu.int/ITU-D/treg/>

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1 Introduction

1.1 Purpose of the Case Study

The reform of the information and communication technology (ICT) sector has fueled major changes at the regulatory and institutional levels. One of the most striking changes has been the rise of the ICT sector-specific regulatory agency. By September 2001, there were 110 such agencies operating separately from telecommunications service providers. The number of telecommunications regulatory authorities is expected to increase to at least 120 by the end of 2001. Many of these agencies have been created only in the last five years. They mark a true departure from the way countries around the world approach economic regulation, in general, and the regulation of communications industries, specifically.

It is one thing for countries to make a policy decision to create an independent regulatory agency, and quite another to empower the agency to act independently and effectively. Regulatory agencies are not created in vacuums. Inevitably, they are the products of political, social, legal and economic conditions that exist at fixed points in time in each country. Nor are these conditions static; regulatory approaches and policies change, and agencies change with them. There is no textbook for government policy-makers to quote, chapter and verse, in establishing an independent regulatory agency that will achieve their national goals. Moreover, once regulators are named and take office, there is no blueprint – and often no national precedent – for how they should operate and regulate. Nevertheless, the means by which each country creates, structures and implements its regulatory body is one of the most important factors in the success of its reform process. Increasingly, then, newly appointed and responsible regulators are searching for models and best practices as guideposts for their own actions.

Because the International Telecommunication Union (ITU) is receiving a growing number of requests for best practice guidelines and recommendations related to the independence and effectiveness of regulatory bodies, the Sector Reform Unit (SRU) of the ITU Telecommunication Development Bureau (BDT) decided to conduct a series of case studies on the topic of regulatory independence and effectiveness.

Botswana was selected as one of five SRU case studies to be conducted in 2001 for a number of compelling reasons. Botswana has won a well-deserved reputation as one of the first countries in the African region to establish an independent and effective regulatory body. In fact, its level of independence and effectiveness may develop as a world model. BTA is one of the few regulatory bodies that enjoy complete freedom in licensing operators and in establishing and financing its operational budget. Shortly after it was formed, BTA won plaudits for its licensing mechanism and successfully resolved the country's first interconnection dispute. In addition to successfully regulating Botswana's telecommunication market, BTA has been integrally involved in the creation and on-going work of the Telecommunication Regulators' Association of Southern Africa (TRASA) that has developed model legislation and regulatory guidelines for the Southern African region. Thus, a study of BTA enabled ITU also to study TRASA as a model that may serve other regional regulatory organizations.

2 Botswana: Country background

2.1 Overview

Botswana is a semi-arid, land-locked country in sub-Saharan African country with a land area of nearly 582,000 square kilometers, making it larger than France and just smaller than the state of Texas in the United States. The country enjoys long borders with South Africa, Namibia and Zimbabwe and a 700-meter border with the Republic of Zambia, the world's shortest international border. Most of the country's landmass is taken up by the Kalahari Desert, but the political and economic capital, Gaborone, is located in the South East, close to the border with South Africa. The northern regions of the country have a variety of wildlife including vast herds of elephant as well as lion prides, cheetah, leopards, giraffe, water buffalo and rhinoceros, making it a tourist's dream. Subsistence farming and cattle ranching predominate agricultural activities.

Botswana has a prudent political culture. Since independence, Botswana has become renowned for good governance, intolerance for corruption and solid respect for legal processes. Botswana



was one of the world's poorest countries when it achieved independence in 1966. Fortuitously, the nation discovered large diamond reserves shortly after independence that have driven its economy ever since. Botswana's land mass is also home to deposits of gold, copper, nickel, manganese, coal, salt, soda ash, potash, silver and iron ore. Since the discovery of diamond reserves, the government began channeling resources into development, including improving the nation's road network, schools and health centers. While much work remains to be done, Botswana continues to devote its resources to development projects.

Village life remains extremely important for Botswana (as the people of the nation are called). It is rare to find a person in the capital that claims to come from Gaborone. Instead, most residents of the country's biggest urban center will identify the village from which they come and those who can afford it often maintain a second residence in their natal village for weekends or vacations.

2.2 History and Political Environment

In the late 1800s, the country was ruled by individual chiefs who controlled their respective territories. When Botswana was faced with a threat of annexation by Cecil John Rhodes, three of these Chiefs Khama III, Sebele I and Bathoen I sought protection from the British who declared Botswana as the British Protectorate of Bechuanaland in 1885. On 30 September

1966, the country declared its independence, and Sir Seretse Khama, a grandson of Khama III, became the country's first president. Sir Seretse Khama, who founded the Botswana Democratic Party (BDP) held office until his death in 1980. Since then, Botswana has had two changes of President, Sir Ketumile Masire (1980-1998) and Festus Mogae (March 1998 to present), both BDP loyalists whose party continues to win general elections which are held every five years.

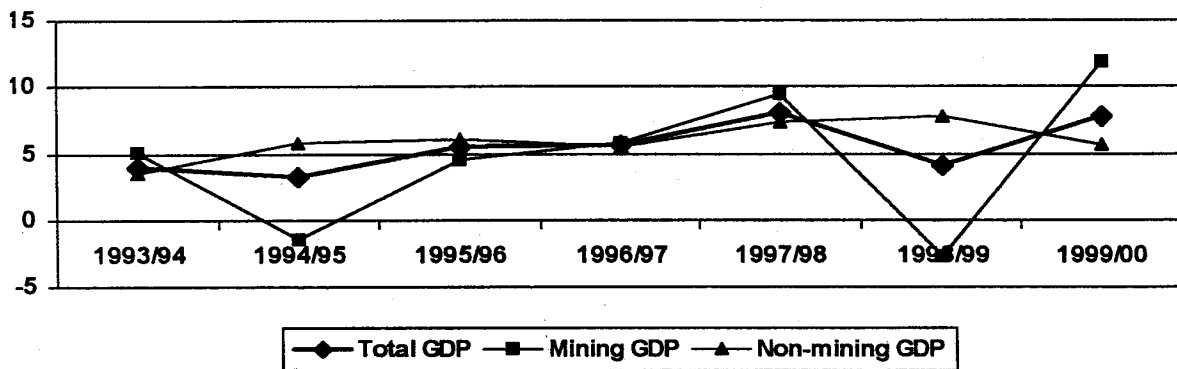
President Mogae is both the head of state and the head of government. There is a bicameral Parliament made up of the House of Chiefs and the National Assembly. Although the House of Chiefs performs mainly an advisory role, Botswana continues to respect their chiefs, and Botswana's society is regarded as hierarchical. Its legal system is based on Roman-Dutch law, although the criminal law is embodied in a penal code that is based on the English criminal law system. Botswana has a High Court and a Court of Appeal. Women and men were granted suffrage at independence.

2.3 Demography

Botswana's population is estimated at about 1.68 million based on the preliminary figures that were released around the time of this report after an August 2001 census that is normally held at ten-year intervals. While there is agreement on current population figures, life expectancy estimates vary. The government reports life expectancy of 67, but other sources report a life expectancy of between 39 and 41 years due to the HIV/AIDS epidemic. HIV/AIDS has affected nearly 36% of the population in the 15-49 year age group, giving Botswana perhaps the highest AIDS rate in the world. Botswana's estimated population growth rate in the period from 1999-2001 was down to 2.3% from 3.5% in the period between the 1981 and 1991 census.¹ Even before HIV/AIDS, Botswana was sparsely populated, with only 2.8 people per square kilometer.

¹ The World FactBook 2000-Botswana <http://www.odci.gov/cia/publications/factbook/geos/bc.html>. See also UNDP Human Development Report 2001 at <http://www.undp.org/hdr2001/back.pdf>

Figure 1 – Real Growth Rate for Total GDP and Selected Sectors: 1993/1994 – 1999/2000



Source: Central Statistics Office, Ministry of Finance and Development Planning.

The majority of the population is of Tswana origin. The remainder of the population is composed of several ethnic groups that include Kalanga-speakers, the Basarwa (Bushmen), Herero (originally from Namibia), and other groupings.

The national language is Setswana, but English is an official language that is widely spoken in business and government. While higher education is conducted mostly in English, the Setswana language is studied up to the PhD level.

“Pula” is perhaps the most important word in Botswana. It means “rain,” which is highly valued in the semi-arid climate and it is also used to denote “peace” because, when it rains, Batswana believe that every creature then becomes happy and there is peace. “Pula” is also the name of the national currency, and is used as a greeting, to wish good luck in the future.

2.4 Economy

Botswana’s economy is closely tied to that of South Africa. Gross domestic product (GDP) for Botswana in 2000 was USD 6 billion, or USD 0.4 billion as measured by purchasing power parity (PPP).² GDP per capita is USD 3,560, making it the second highest in sub-Saharan Africa following South Africa. Botswana’s economy is dominated by the diamond-mining industry, which contributed 33% of GDP in 1999/2000.³ The tourism industry accounts for

just over 10% of GDP, as do financial and business services. The general government, including parastatals (state-owned banks, companies and institutions), makes up more than 16% of the GDP. Agriculture, which employs more than 25.7%⁴ of the population, contributes only 3% to the nation’s GDP, due to severe droughts and poor soil conditions. Unemployment is officially reported at 15.6% in 2000, but other estimates peg unemployment at 30%,⁵ with 33.3% of the population living below the poverty line.⁶

Botswana’s currency is the Pula (BWP). One hundred Thebe equal one BWP. Average workers’ salaries hover around BWP 3,000 per month, while the average monthly salary of government workers is about BWP 6,000 per month and that of people working for private sector companies is around BWP 8,000 per month, based on interviews conducted as part of the field research for this report.

Botswana’s economy is based on free market principles. Its motivation in establishing parastatals has been to step in where the private sector has failed to enter the market, rather than to control local industry. Botswana has a total of 27 parastatals.

² Id.

³ Country Profile 2001 Botswana, The Economist Intelligence Unit, <http://www.eiu.com>

⁴ Statistical Bulletin, June 1999 Vol. 24, No. 2.

⁵ Country Profile, Id.

⁶ See UNDP Human Development Report 2001 <http://www.undp.org/hdr2001/back.pdf>

2.5 Human Development, Education and Health

Botswana ranks 114 out of 162 countries on the United Nations Development Programme's Human Development Index (HDI).⁷ While its HDI ranking is low on a global basis, it is the sixth highest HDI in sub-Saharan Africa.⁸ The HDI is a calculation based on a variety of factors, including wealth, health, education and quality of life.

Botswana's literacy rate for those 15 and above was 76.4 in 1999.⁹ Both males and females are expected to complete 12 years of schooling before embarking on a tertiary education.¹⁰ The country spends 8.6% of its GNP on education, 2.5% of its GDP on health and 3.4% of its GDP on military expenditure. Botswana offers liberal university tuition loans. All payments are deferred until a graduating student secures a job. Graduates are then expected to re-pay the equivalent of USD 25 per month over a four-year period. Many members of the educated class complete their higher education abroad, mainly in universities in English-speaking countries like the United States or the United Kingdom. Most students return to Botswana upon completion of their studies. Botswana like to say that their students board the plane for home as soon as they complete their examinations.

The biggest health threat facing Botswana is the HIV/AIDS epidemic. HIV/AIDS has ramifications far beyond health. Private companies, for example, have begun stepping up HIV/AIDS prevention activities in an effort to mitigate the loss of trained workers. The government has launched a campaign to combat this epidemic.

Residents of Botswana are eligible for nearly free hospital treatment. The government-run hospitals, government-aided hospitals and health clinics all over the country offer free services once a patient pays a BWP 2 registration fee – about 35 US cents. In addition, at least 90% of

the population has access to essential drugs, according to UNDP.

Botswana ranks 103 on the UNDP Gender-related development index. The adult literacy rate is actually higher for women (78.9) than for men (73.8). Women hold seventeen % of the seats in the National Assembly. Women make up 26.7% of the total of government at the managerial level.

3 Sector Reform

3.1 History of Sector Reform

Botswana's history of sector reform dates to 1980. Parliament approved the Botswana Telecommunications Corporation (BTC) Act on 1 April 1980 establishing part of the Department of Posts and Telecommunications as a parastatal. At the same time, the government entered into a management agreement with Cable and Wireless PLC to manage BTC as the sole provider of telecommunication service in the nation and separated postal services from telecommunication services. The management agreement between C&W and Botswana Government ended in November 1995.

By the mid 1990s, citizens began to complain about the poor quality and lack of availability of service provided by the incumbent. Government officials also became aware of mobile cellular technology after a number of mobile cellular equipment manufacturing companies traveled to Botswana. These manufacturers visited government officials, encouraging them to purchase mobile cellular networks and painted a picture of attractive service options.

The government charged the Ministry of Works, Transport and Communication (MWTC) with introducing sector reform and competition – especially in mobile service – in Botswana. Mr Moatshe Joseph Moatshe, Deputy Permanent Secretary in MWTC by then,¹¹ was asked to lead the project. Mr Moatshe attended workshops on telecommunication development in 1993 and 1994, one sponsored by the United States Agency for International Development (USAID) in Namibia, the other held at Columbia

⁷ A rating of "1" is the highest ranking.

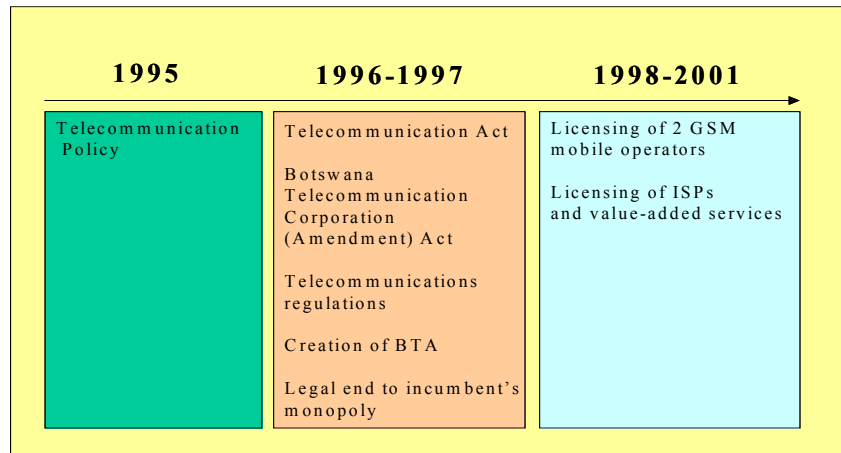
⁸ See <http://www.undp.org/hdr2001/back.pdf>

⁹ Id.

¹⁰ World Bank World Development Indicators 2001.

¹¹ Mr Moatshe is currently Deputy Permanent Secretary to the Ministry of Labour and Home Affairs.

Figure 2 – Telecommunication Reforms



University, sponsored by Botswana Government. After attending these workshops, Mr Moatshe concluded that Botswana needed assistance from qualified experts to develop detailed telecommunication policy and legislation. MWTC awarded a consultancy contract to a consortium consisting of Swedtel and ISO-Swedish Management Group, jointly financed by the government of Botswana and the Swedish International Development Agency (SIDA). Through this contract, Swedish experts came to live and work in Botswana for an extended period of time.

3.2 Public Consultation on Sector Reform

Mr Moatshe insisted that the project include input from the whole country. Mr Moatshe and a Swedish consultant¹² held meetings in every major town, talking to local people about their perception of sector reform. They met with the civil society, which included local politicians, business leaders and village chiefs, to exchange ideas and views. Everyone expressed consensus on the need to introduce competition in the provision of telecommunication services. Mr Moatshe stressed that the public consultation was very much a two-way dialogue. In addition to the government representatives explaining the planned sector reform programme, people in rural areas yielded new ideas to the sector reform architects.

¹² Mr Claes Rosvall of ISO-Swedish Management Group.

3.3 Telecommunication Policy and Legislation

Following the comprehensive public consultation, MWTC prepared the December 1995 Telecommunications Policy for Botswana, with the help of a Swedish Consultant and back up support from both ISO Management Group and personnel from the Swedish Telecommunications Regulatory Authority in Sweden. This document was subsequently considered by the Cabinet and approved by Parliament. The workshops that Mr Moatshe attended early in the 1990s had emphasized that Botswana would have to establish an independent regulator if its goal was to attract investment. The need for an independent regulator was spelled out clearly both in the draft and final versions of the policy. The Telecommunications Policy also indicated that more than one mobile cellular license would be granted. Some companies threatened that they would only invest in an exclusive mobile cellular operator. After it was created, the Botswana Telecommunications Authority (BTA) remained firm and ultimately succeeded in attracting sufficient interest in the tender for two GSM licenses. (see Section 7.1) .

Messrs. Moatshe and the Swedish consultant from the ISO-Swedish Management Group also developed a draft Telecommunications Bill that later became an Act. The text, which was derived directly from the policy, was later finalized by the Office of the Attorney General and approved by the Cabinet before being submitted to the National Assembly. The National Assembly debated it for one Parliamentary session, approximately two to three months, before approving it in August 1996.

Box 1: Legislation governing Botswana’s telecommunication sector

- Telecommunications Act 1996, provides for the creation of the regulatory authority and introduces competition in the provision of telecommunication services.
- Botswana Telecommunications Corporation (Amendment) Act 1996, eliminates BTC’s legal monopoly over the provision of all public telecommunication services.
- National Broadcasting Act 1998, establishes the National Broadcasting Board.
- Telecommunication Regulations 1997, promulgated by BTA Board establishes rules, inter alia, on:
 - Numbering;
 - Property access;
 - Radio communication equipment and testing;
 - Type approval.

The 1996 Telecommunications Act provides the legislative foundation for the creation of the Botswana Telecommunications Authority (BTA). It provides a blueprint for its organizational structure, functions, powers and duties. These are discussed in Section 4.2.

On the same day the Telecommunications Act of 1996 was passed, the National Assembly also passed the Botswana Telecommunications Corporation (Amendment) Act, 1996. The latter law eliminated BTC’s legal monopoly over the provision of all public telecommunication services.

During the field research for this case study, Mr Moatshe emphasized the importance of the sequence of sector reform. He believes that it is vital that countries first prepare a policy, derive their legislation directly from that policy and then establish a regulatory authority charged with facilitating competition in the provision of telecommunications services – all prior to authorizing market entry by competitive players. Mr Moatshe also noted the importance of preparing a clear policy and legislation. Investors seek transparency and consistency. These key legal instruments allow investors to have insight into the country’s thinking. Clear policy and legislation further enable nations to attract quality investors willing to make long-term commitments. Without these key legal instruments, countries may only succeed in attracting investors interested in short-term activities, the government official explained.

3.4 Telecommunications Market Players

The 1996 Telecommunications Act gives BTA complete authority – within the guidelines

established by the 1995 Telecommunication Policy – to license all operators. Likewise, the BTC (Amendment) Act authorized BTC to provide telecommunication services only under license from BTA. BTA granted BTC a license for fixed line voice services. The incumbent is also licensed to provide value added services. BTC does not have a license to provide mobile cellular services because it was not successful in the GSM tender bidding in a joint venture with Vodacom of South Africa.

BTC is 100% government owned with the Ministry of Finance and Development Planning serving as its exclusive shareholder. The Ministry of Works, Transport and Communications (MWTC) bears responsibility for administration of BTC. Botswana has announced plans to privatize BTC, although these had stalled at the time of the writing of this case study. The BTC privatization plans are discussed in Section 10.4.

In addition to providing fixed-line voice services, BTC provides value-added products and services including leased circuits, data communications, payphones and paging. In mid-2001, BTC began offering a wireless local loop service in order to expedite customer connections to their network. Under the Telecommunication Policy, BTC can compete in new service segments, such as the Internet Service Provider (ISP) market, as long as it establishes a separate subsidiary. BTC’s ISP subsidiary, Botsnet, is one of 10 ISPs in Botswana.

In 1998, the regulatory authority licensed two new market entrants, Mascom Wireless (PTY) LTD (Mascom) and Vista Cellular (PTY) LTD (Vista), to provide mobile cellular services. Since it was established, the regulatory authority has also licensed ten Internet Service Pro-

proven. Their conclusion, after having attended the ITU World Telecommunication Policy Forum on VoIP, is that the sector is in disarray about the benefits of VoIP. BTA prefers to wait until VoIP has been better studied before authorizing its use in Botswana. BTA is also concerned that authorizing VoIP will adversely affect BTC's income, given that BTC continues to enjoy a monopoly on fixed-line voice services. But clearly, BTA has not closed the doors on this issue. At least one ISP believes that BTA should authorize VoIP and allow consumers to decide whether they will accept lower quality of service for a cheaper price. The ISP also noted that quality is related to bandwidth and that Botswana's new VSATs should provide greater bandwidth, improving quality for VoIP services. At least one VSAT licensee believes that once it begins providing innovative data based services its customers will exert pressure on BTA to authorize VSAT operators to carry voice as well. Still, this licensee understands that in addition to protecting BTC's voice monopoly, BTA's prohibition of VoIP serves as an incentive to encourage new market entrants to develop data communications in Botswana.

Mascom's palm tree mast



Source: Mascom

BTA awarded the first ISP license in August 1999. Prior to this time, BTA allowed ISPs to operate without a license so that it could focus its limited staff resources on licensing GSM operators and radio stations. Like the VSAT licenses, the ISP licenses stipulate that ISPs cannot carry voice over data. Nevertheless, Internet café owners believe it would be difficult for them to ensure that their clients do not place Internet calls. ISP license fees are kept deliberately low at BWP 3000 annually for registration purposes only. This is meant to encourage more providers to come to the fore.

BTA also licensed two commercial FM Broadcasting Radio stations in 1999. Since then, the National Broadcasting Board (NBB) was created and has assumed responsibility for future broadcast licensing. (See Section 3.7).

3.5 The Internet in Botswana

3.5.1 Internet Use

Internet use in Botswana is very limited, although there are no official numbers. One Internet café owner who reported about 100 to 150 customers per day estimated between 50,000 to 60,000 Internet users in Botswana, including those who access the Internet at work, school or Internet cafés. Only about half of all households have access to electricity, reducing the pool of potential Internet users significantly. The cost of personal computers is also too expensive for most Batswana. A good laptop costs BWP 20,000, and even low-end personal computers can run between BWP 6,000-7,000. Both are out of range for all but the rich. In addition, bandwidth prices are very high. 512 kbit/s bandwidth costs BWP 64,000 a month, the price of a T1 in the U.S., according to one international data gateway licensee.

Although private Internet access is limited, many Batswana have access to the Internet at work or school. Students at the University of Botswana are provided free Internet access. Still, not all primary schools have electricity and some secondary schools operate on generators too weak to run personal computers. Another factor hampering Internet uptake is the lack of indigenous local content. At least some entrepreneurs in Botswana appear motivated to rise to this challenge. Some parties have also called for an Internet development policy.

Box 2: Awarding of licenses



First license granted by BTA, a Mobile license to Mascom Wireless (PTY) LTD on 17 February 1998.

Mr C.M. Lekaukau, Executive Chairman of BTA hands over license to Mr S. Masiyiwa of Mascom and sitting left of Mr Lekaukau is Hon D.K Kwelagobe, M.P, then Minister of MWTC.



Awarding of a broadcasting license to the first private radio station YaronaFm by the Executive Chairman of BTA, Mr C.M Lekaukau, on World Telecommunication Day, 17 May 1999.

Receiving the license is Mr Percy Raditladi, the Radio Station Managing Director.



Awarding of Internet Service Provider (ISP) and an International Gateway License to UUNET Botswana. Two other International Gateway Licenses were awarded to Vista Cellular and AME Enterprises.

The Executive Chairman of BTA, Mr C.M. Lekaukau awarding an ISP and International Gateway license to Mr T. Motsumi, General Manager of UUNET Botswana, in February 2001.

Source: BTA.

For the moment, it is very difficult to find a high-speed connection to the Internet in Botswana. Accessing email can be extremely slow, and graphic-laden websites all but impossible. Even BTA had a very slow Internet connection at the time this case study was being prepared. The result is that BTA officials are hampered in their ability to send and receive emails or to use web-based resources. BTA is hopeful that the new international data gateway licensees will soon provide the high-speed connections they have promised so that BTA can move more readily into the new Information Society.

3.5.2 Internet Exchange Points

Botswana has an ISP association, but has not yet established a formal national Internet exchange point (IXP). Without an IXP, Internet traffic travelling between local ISPs may transit through Europe or a US Internet backbone, fueling high prices for Internet access. All Internet traffic in Botswana currently flows through BTC, which serves, effectively, as the nation's IXP. This may soon change, however, now that BTA has licensed six international data gateway (VSAT) operators. One ISP has informally suggested that BTA establish a

neutral IXP, perhaps to be located at a public university.

3.6 World Trade Organization commitments

Botswana is a member of the World Trade Organization (WTO), but has not made any commitments under the Basic Telecommunication Service Agreement, known formally as the Fourth Protocol to the WTO General Agreement on Trade in Services. While BTA has prepared a formal draft schedule of basic telecommunication commitments, it has never submitted this document formally to the government. BTA believes that the government should finalize its schedule for the privatization of BTC. But BTA is also not convinced that joining this agreement would have any immediate benefits for Botswana. In any event, BTA is confident that it has already implemented the Reference Paper commitments on regulatory issues and that Botswana's regulatory environment is conducive to competition.

3.7 Broadcasting in Botswana

Botswana has two private commercial radio stations operating exclusively in Gaborone, Yarona FM (Pty) LTD and Your Friend (Pty) LTD. Radio Botswana includes the non-commercial Radio Botswana One, which plays no advertising, and the commercial station Radio Botswana Two. Both are broadcast nationwide. Botswana Television, a non-commercial station that is part of the Department of Information and Broadcasting with Radio Botswana, started broadcasting in July 2000. There is no commercial television station in Botswana and no cable TV (CATV). A pay-satellite service, MultiChoice, headquartered in South Africa, broadcasts commercial stations from Botswana's southern neighbor. Gaborone Broadcasting Corporation is a television re-broadcaster.

Parliament passed the Broadcasting Act of 1998 on 6 August 1998. The Broadcasting Act called for the creation of a separate National Broadcasting Board (NBB) reporting to the Minister for Presidential Affairs and Public Administration in the Office of the President. The NBB was created on 1 August 2000. The Broadcasting Act was only fully implemented

on 29 June 2001 when the last parts of the Broadcasting Act empowering the NBB to award broadcasting licenses were put into effect.

BTA was fully responsible for broadcasting regulation until 29 June 2001. Among its other broadcasting activities, BTA licensed Gaborone's two commercial radio stations in 1999. Although BTA no longer has the power to award broadcast licenses, all licenses previously issued by BTA will remain in effect for their full term.

The government established NBB as a separate body after media companies complained to the Office of the President that the BTA Board had no expertise in broadcasting, BTA explained. The BTA Executive Chairman believes that a merger between BTA and NBB will occur in the not too distant future because of the convergence of the regulation of broadcasting, telecommunications and IT. For example, although no operator currently provides CATV, parties interested in obtaining a CATV license have approached BTA. CATV operators could offer Internet access, posing challenges to the current bifurcated regulatory system.

In the meanwhile, now that the NBB has been established and fully empowered, it will award any future broadcasting licenses. BTA holds the view that Radio Botswana and television services should be licensed. In addition, as the nation's only public broadcaster, Radio Botswana's role needs to be spelled out more clearly relative to the other private broadcasters. Like the BTA, the NBB will enjoy complete discretion in licensing new broadcasters without approval by its oversight ministry.

The NBB will also supervise broadcasting activities and allocate spectrum for broadcasting services. BTA has authority over the national spectrum plan (including military use), but the NBB will be responsible for the allocation of the broadcasting portion of the national plan (including any military radio or television stations) as determined by BTA from time to time. However, since the NBB is a part-time board, BTA will serve as the board's technical advisor and secretariat.¹³ BTA will therefore

¹³ The Office of the Attorney General will provide legal advice for the NBB.

continue to wield significant influence in the licensing of future broadcasters – although the NBB will be free to ignore BTA's technical advice if it should choose to do so. The NBB will be required to pay BTA for the services it provides.

3.7.1 NBB Board

The NBB is composed of 11 part-time members. The Broadcasting Act requires one member each from the Office of the President, the Ministry of Commerce and Industry, the Department of Cultural and Social Welfare in the Ministry of Labour and Home Affairs, and a representative of BTA.¹⁴ In addition, seven board members, including the Chairman, were selected by a Nominating Committee composed of a member of the Law Society of Botswana, a representative of the Vice-Chancellor of the University of Botswana and a representative of the Office of the President. The nominating committee placed an advertisement in local newspapers seeking candidates. Those that replied were placed on the list of candidates. The Chairman of the NBB, Dr Masego Ayo Mpotokwane, is a full-time environmental science lecturer at the University of Botswana and has no direct broadcasting experience.

One of the NBB appointments has been criticized because he is a Director of Broadcasting and Information for Radio Botswana. Some private radio operators complained that Radio Botswana is an operator, and that it is unfair to allow one operator to be represented on the board. The Office of the President has acceded to this view and has now regularized it by appointing a Deputy Permanent Secretary in the Office of the President.

The NBB board had a number of meetings since its first meeting on 30 November 2000. So far it has met with the market players and authorities with broadcasting responsibilities in neighboring countries, such as ICASA (Independent Communications Authority of South Africa).

¹⁴ To date, the Executive Chairman of BTA has served as the BTA representative to the NBB Board. But Mr Lekaukau has written to the Minister for Presidential Affairs and Public Administration and requested that he be replaced by the head of the Broadcasting Regulation Department, Bishy Mmusi. Mr Mmusi's appointment has now been confirmed by the Minister.

The NBB Chairman also consults frequently with BTA.

3.7.2 Broadcasting Policy

The NBB Chairman intends to meet with all operators and the public to develop a national broadcasting policy. BTA drafted a policy framework for the Office of the President in 1999, but it was never completed. The NBB will attempt to finalize that paper into a draft official government policy for approval by Government that will define issues such as public broadcasting, local broadcasting, content issues, including standards of public decency, and foreign ownership. NBB also plans to launch a website in the near future.

3.7.3 NBB Budget

The NBB received a government appropriation of BWP 250,000 to start its operations, far less than the BWP 4.2 million appropriation received by BTA in its first year of operation. Unlike BTA, NBB is not empowered to retain any license fees; all license fee revenues will be deposited in government accounts.

3.8 Positive Effects of Sector Reform

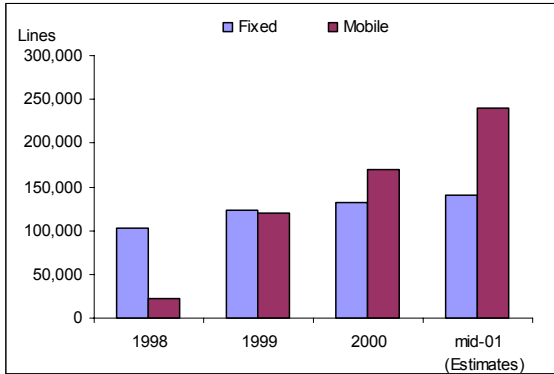
Botswana's teledensity rate has jumped since it embarked on its sector reform program. When BTC was created in 1980, the company had just 6,000 fixed lines. In 1992, when Minister Magang was appointed to head the MWTC, BTC had 44,000 lines. The number of fixed lines has more than doubled since the 1996 Act was passed, growing from 59,673 in 1996 to 140,000 by mid-2001 to reach almost 10% of the population. The number of mobile subscribers has jumped from 0 in 1998 to nearly 250,000 in mid 2001, reaching 16% of the population.

Vista reported 80,000 mobile cellular subscribers as of July 2001 (not counting an additional 20,000 that have been de-activated). Mascom reported 157,000 to 160,000 customers as of early July 2001. Vista estimated that together, Vista and Mascom had 250,000 subscribers in July 2001.

Vista had reported 50,000 subscribers at the end of December 2000, adding 5,000 per month on average since this time. Vista predicted 120,000 customers by the end of 2001 while its

competitor Mascom estimated close to 200,000 to 210,000 subscribers by this time. Vista believes the total mobile market in Botswana could reach 500,000 to 600,000 subscribers or 35% of the nation’s population.

Figure 4 – Growth in lines



Source: BTA, BTC, Mascom and Vista.

Mascom introduced pre-paid services in November 1999 and immediately realized an upsurge in its customer base. Nearly 90% of both mobile operators’ subscriber bases are prepaid. BTA believes that the mobile operators also enjoyed an upsurge in their subscriber base in the wake of a billing crisis experienced by BTC in 2000 and 2001 caused by new billing software. BTC was owed about BWP 200,000,000 (over 33 million USD) but was unable to bill customers for months. When it finally did send billing statements, many customers received huge bills, at times amounting to over three times the average worker’s salary. Receipt of the delayed bills sparked many BTC fixed line customers to switch to mobile service. Many concluded they would rather pay more for mobile service than face BTC’s billing aberrations. The BTC billing problem was rectified in February 2001, but it continues to encounter resistance from customers in connection with outstanding bills.

The presence of the two competitive mobile operators has also served as an incentive to improve the incumbent’s performance. It forced BTC to realize that if it did not provide the level of service customers demanded they would bring their business to another service provider. The majority of end users are also better educated than when the 1996 Telecommunications Act was passed. Consumers are beginning to appreciate the differences in service

provided by different operators. BTC has rolled out a new service under the wireless local loop platform.

Since 1999, some mobile end user tariffs have been lowered. Mobile operator Mascom, for example, lowered its international rates to those charged by BTC.

Investment in the sector increased from BWP 49 million to BWP 400 million (between 8.4 to over 68 million USD) according to estimates provided by BTA Executive Chairman Cuthbert Moshe Lekaukau.

The architect of Botswana’s sector reform program, Mr Moatshe, said that he had not expected the explosion in mobile subscribers at the time he prepared the Telecommunications Policy and Act. Mr Moatshe noted that the explosion in mobile subscribers has been of benefit to small and medium enterprises and rural populations. Plumbers, for example, can now be reached throughout serviced areas. The result is that small businesses are more vibrant and their customers get better service. Many people living in Gaborone come from rural areas. These new city dwellers used to spend a lot of money on travel to maintain contact with their relatives. They can now use more widely available telecommunication services to keep in touch with family, reducing their travel expenses.

4 Institutional Structure of BTA

4.1 Legislation Creating BTA

BTA was created in December 1996 as a parastatal under Part II of the 1996 Telecommunications Act. Section 3, reads that “There is hereby established a regulatory authority to be known as the Telecommunications Authority (hereinafter referred to as “the Authority”), which shall be a body corporate with a common seal, capable of suing and being sued, and, subject to the provisions of the Act, of performing such acts as bodies corporate may, by law, perform.”

4.2 Mandate, General Functions and Duties of BTA

The 1996 Telecommunications Act details the functions, powers and duties of BTA. BTA is

empowered to “supervise and promote the provision of efficient telecommunications services in Botswana.” BTA’s legislative mandate reflects the nation’s desire to expand the reach of basic telecommunication services, and more specifically to improve the level and quality of service provision at the time the Act was passed.

BTA’s mandate covers three main areas:

- Promoting the provision of services to satisfy all reasonable demand for services, including emergency services, public call boxes services and directory information services;
- Promoting the interests of consumers in respect of prices charged, quality and variety of services, equipment and terminal equipment; and
- Promoting and maintaining competition and efficiency among service providers.

Specifically, the Act grants BTA the power to publish principles to be applied in the setting of tariffs and to approve tariffs. The legislation further grants BTA the exclusive right to award licenses, to establish a national radio frequency plan, monitor radio frequency use, resolve interconnection disputes and charge and retain regulatory fees. A discussion of BTA’s key regulatory tasks is included below.

4.2.1 Accountability and Reporting Requirements

Under the 1996 Telecommunications Act, BTA reports to the Minister of Works, Transport and Communication. BTA is required to submit to the Minister an annual report on its yearly operation together with an audited report of its financial accounts. The Minister is required to submit these documents to the National Assembly to ensure accountability.

4.3 Finance

BTA has almost complete financial independence. Under the 1996 Act, the Minister approves spending only for non-regulatory activities. Ever since its first year of operation, BTA has financed its budget exclusively through regulatory fees and investment income. The Minister confirmed that BTA never seeks funding from the MWTC.

The regulatory authority prepares its own budget every year, covering operational and procurement expenses. Each director submits a budget proposal to the Executive Chairman accounting for all operational and non-operational costs. The Executive Chairman bases his budget allocation decisions on the Authority’s priorities as set out on a yearly basis. The final proposal is submitted to the BTA Board of Directors, which is empowered to approve the budget.¹⁵ With the exception of expenditures for non-regulatory activities, neither the Minister for Works, Transport and Communications, the Finance Minister or any other government official has any involvement in BTA’s budget.

Under the Telecommunications Act of 1996, BTA is subject to an annual audit by an independent audit firm. In addition, BTA’s financial reports are submitted to the Auditor General, apart from submission to the Minister, who has the right to advise the government that BTA’s books should be inspected. The Auditor General has never recommended that BTA’s books be inspected and BTA has always received a clean certificate from the auditors.

BTA received a government appropriation of BWP 4.2 million¹⁶ in its first year in order to launch its operation. It has been completely self-sufficient ever since with the exception of a grant of BWP 2.2 million in 2001 to fund the first phase of the spectrum-planning project. The initial government allocation was in addition to BWP 4 million from the Botswana and Swedish governments to finance the costs of two Swedish consultants during the initial phase of BTA’s operations. The 50/50 funding from the government of Botswana and the Swedish International Development Agency (SIDA) continued through the year 2000.

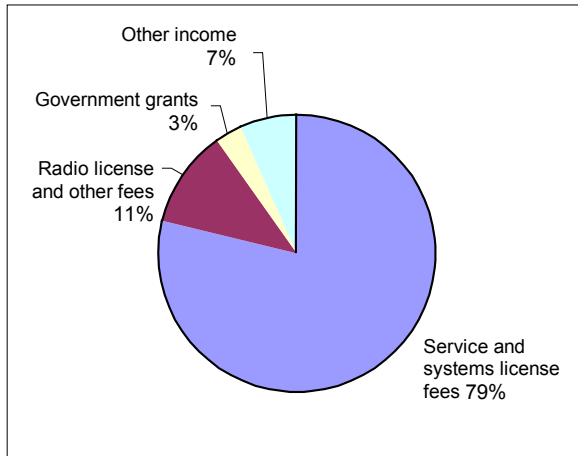
Total revenues and income for fiscal year 2001, ending 31st March, is over BWP 33,000,000 (approximately 5.6 million USD). BTA has an operating surplus of just over BWP 20 million in the same period with a small component of the surplus attributed to interest income and exchange rate gains from investment funds

¹⁵ The Board has so far never refused to approve a budget proposed by the Executive Chairman.

¹⁶ An allocation that was worth about USD 1 million at the time.

purchased in US dollars. Its revenue from service and system license fees increased from around BWP 13 million to approximately BWP 27 million in 2000/2001.

Figure 5 – BTA Budget 2001/2002



Note: Government grants represent a contribution to a spectrum-planning project.

Source: BTA.

Ninety percent of BTA’s annual budget is financed directly by regulatory fees. Seventy nine percent is financed through service and systems license fees. Eleven percent of the budget comes from radio license fees, based on the number of transmitters. Operators are charged license fees levied at 5% of their net annual turnover and separate radio license fees for spectrum. Both mobile operators complained that this fee is too high relative to other countries. One operator noted that while the fee may have been reasonable when operators had smaller subscriber bases, as of 2001 it was paying fees equaling close to BWP 1 million per month.

BTA believes that its fees are comparable to those levied in other countries in Africa and in particular South Africa also charges 5% of net turnover. BTA also plans to use its budget surplus to finance a universal service program and for long-term investments. It will review the current radio license pricing structure in view of a recent spectrum management study.

BTA attributes its large surplus to several factors. First, the continued favorable market conditions for the three main operators (BTC, Vista and Mascom) have generated increased fees levied as a percentage of the operators’ net turnover. Second, BTA was unable to implement

some planned projects last year due to lack of human resources. Its lack of human resources was a product of insufficient office space before BTA moved to its new headquarters. Now that BTA has constructed a new office building, it has embarked on a recruitment drive to hire more staff to implement planned projects. Third, the authority has undertaken more effective cost-cutting measures.

Construction of the new BTA building is nearly complete. The construction project cost BWP 20 million (approximately USD 3.5 million). BTA is paying for the construction costs from its own cash resources. Construction of the new office building began in July 1999 and the move to the new office building occurred on 25 August 2000. BTA rents half of the building on a commercial basis to the Government. BTA also owns five townhouses rented to private tenants and 23 plots of land, one of which will become the site for the Executive Chairman’s residence. The other 22 plots of land will be made available to staff to purchase to encourage home ownership among BTA staff. Those that are not purchased by BTA staff members will be developed by BTA for leasing or outright sale. The Minister for Works, Transport and Communications was required to approve BTA’s housing plan because it was a non-regulatory activity.

5 BTA Organizational Structure

5.1 The BTA Board

The five-member BTA board was established on 20 December 1996 in accordance with the 1996 Telecommunications Act.

5.1.1 Appointment, Removal and Disqualification for Office

The Minister for Works, Transport and Communications appointed all five members of the board. The Telecommunications Act of 1996 establishes that the Minister will appoint:

- one person nominated by the Minister responsible for finance,
- one person nominated by the Minister responsible for commerce,
- one person to “represent the business community” and



BTA Board members (from left to right): Mrs I.O. Sennanyana, Mr R.C. Eaton, Mr C.M. Lekaukau, Ms M.T. Sekgororoane, Ms N.M. Molefi.

- one person to “represent the domestic users of telecommunication services.”

No representative of the Ministry is on the board of BTA. In addition, the Minister appoints one person to be the Chief Executive of the authority who is also the chairman of the board. Under the Act, the Chief Executive must possess “such experience and training as the Minister may prescribe or approve” and must demonstrate “that he is competent to carry out the functions of the Authority.”

Cuthbert Moshe Lekaukau was appointed as the Executive Chairman of BTA on 9 December 1996. Mr Lekaukau was appointed to lead BTA because of his rich administrative experience in Botswana. Mr Lekaukau was a parliamentary draftsman who worked on the 1980 BTC Act when he was a legal draftsman in the Attorney General’s Chambers. He has also been on the board of other parastatals including Air Botswana and BTC and had risen through the governmental ranks to hold the position of Permanent Secretary at the time he was appointed to head BTA.

The Telecommunications Act also states grounds for disqualification and removal from board membership. For example, Section 6(g) of the Act states that a board member becomes disqualified if “he becomes the holder of a license or acquires any interest in a license or in the holder of [a] license issued under this Act.”

Any board member violating this rule is subject to removal by the Minister.

Three of the five current board members are women. All BTA board members were selected because of their well-respected professional reputation in Botswana; none were required to apply or interview for the job. All Board members, with the exception of the Chief Executive, serve in a part-time capacity. The board members were all appointed at the same time, but were given staggered terms so they would not all expire at the same time. Half of the board was given three-year terms, the other half was given four-year terms. Each board member may be reappointed for a period not to exceed four years. Some board members are serving in their second term, following re-appointment. No board member has ever been removed from office.

5.1.2 Remuneration

These part-time board members receive “sitting allowances” for their meeting time and travelling and hotel expenses where applicable. Board sitting allowances are set by the government but are paid from the BTA budget.

5.1.3 Functions of the Board and Chief Executive

The board oversees BTA and approves decisions related to policy and regulation, but takes no decisions on the day-to-day management of

BTA. For example, it was the BTA board – with the help of external experts and the advice of BTA senior officials – that awarded the two GSM licenses. (see Section 7.1). Likewise, BTA’s first public consultation document was brought to the board for its approval prior to being released (see Section 6.1). In addition, the board approves BTA’s annual budget and any additional expenditure of a significant nature not included in the annual budget. The board also provides guidance to BTA, for example on staff

training and pensions. Although the board is responsible for these decisions, it relies heavily on the expertise of BTA staff in making its decisions.

The legislation authorizes the Board to delegate any of its powers and functions to the Chief Executive (or Executive Chairman) or any other officer of the Authority. Likewise, the Chief Executive may delegate his powers to any senior officer of the Authority. In keeping with the 1996

Box 3: Regulatory effectiveness: the need for strong leadership. A profile of the BTA Executive Chairman



BTA Executive Chairman Cuthbert Moshe Lekaukau became an attorney of the Courts of Botswana after obtaining a Bachelor of Laws degree in the University of Botswana, Lesotho and Swaziland in conjunction with Edinburgh University in 1973 and a Master of Laws degree at Columbia University in the City of New York in 1976.

He rose through the ranks of the public service of Botswana from the position of State Counsel in the Attorney General's Chambers until he was appointed as Permanent Secretary in 1984. He served as Permanent Secretary for three different ministries over a 12-year period, namely Ministry of Works, Transport and Communications (MWTC), the then Ministry of Minerals, Energy and Water Affairs and the Ministry of Agriculture.

The President seconded him to MWTC as the founding Executive Chairman of BTA on 9 December 1996 from the Ministry of Agriculture. He retired from the public service in early 1997 and took up a contract position with BTA for five years. Mr Lekaukau’s term ends in March 2002. At the time he was appointed, Mr Lekaukau was given an option to renew his term until 2004 when he reaches the age of 60, to preserve his public service right. Botswana’s mandatory retirement age for civil servants is 60.

He became the founding Board member of BTC on 1 April 1980. He continued as a board member until 1984 when he became the chairman of the BTC Board for five years from 1984 to 1989. Mr Lekaukau has been involved in other parastatals, and was responsible for creating BTC, Air Botswana Corporation and Botswana Railways Corporation and Botswana Postal Services. He was also a founding chairman of both Air Botswana and Botswana Railways. Mr Lekaukau has also been a chairman and board member of many parastatal corporations and private companies in which the government has a stake, including mining companies like Debswana Diamond Mining Company, De Beers Centenary A.G, Soda Ash Botswana (now called Botswana Ash (Pty) Ltd), BCL Ltd and Botswana Diamond Valuing Company.

Mr Lekaukau enjoys wide respect in Botswana. He is very outspoken and follows his words with his actions. Mr Lekaukau’s stature within Botswana has enabled BTA to be taken seriously both in Botswana and internationally. He served as the second chairman of the Telecommunication Regulators’ Authority of Southern Africa (TRASA), is the current Vice Chairman of the Commonwealth Telecommunications Organization (CTO) Council and holds or has held many leadership positions within ITU, including Chairman of ITU Development Symposium for Regulators, Chairman of the first African Regulators’ Forum and Vice chair of ITU-D’s Telecommunication Development Advisory Group (TDAG).

One player in Botswana’s telecommunications sector noted that, “you should be prepared to go up against Moshe Lekaukau.” Many attribute BTA’s success to Mr Lekaukau’s leadership and willingness to fight for the Authority.

Act, the board has delegated certain powers to the Executive Chairman. The Executive Chairman takes certain decisions and simply reports them to the board at its meetings. For example, the Executive Chairman rendered the 1998 interconnection decision on his own, reporting it to the board at a later time (see Section 6.2). Nevertheless, the Executive Chairman believes that it was important that the interconnection decision have the full backing of the board. These are decisions the Executive Chairman makes based on his best judgment and political instincts. There are no rules delineating which decisions should be taken by the full board and which the Executive Chairman may reach on his own and therefore it is an informed decision of the Executive Chairman to take such a decision taking into account collective responsibility.

5.1.4 Board Meetings

The Act provides rules governing board meetings, including rules on voting and forming a quorum. Although voting procedures are spelled out in the Act, the Board has not had the occasion to vote on any decisions. Board members prefer to try to reach consensus on all decisions. Board members agree that it is preferable they reach consensus so that all members feel comfortable with their decisions and can justify them afterwards.

The board meets at least quarterly. According to the 1996 Telecommunications Act, three board members are required to form a quorum. The Board has convened meetings with three people, but never with fewer. For example, all five members were present at the meeting in which the two GSM licenses were awarded. In addition, it has on occasions taken into account written contributions from missing members. The Executive Chairman encourages written views on board matters even if a board member is absent for some reason. Board meetings are

not open to the public. Minutes from board meetings are distributed to the members of the board.

The Executive Chairman provides the board with any necessary papers well in advance of their meetings so the board members have time to study them. BTA directors and the General Counsel have a standing invitation to attend all board meetings. Lower level staff members attend upon invitation on specific matters. BTA staff provides explanations to the board members, especially on technical issues. In addition, the General Counsel serves as the secretariat for the board. The Board requests BTA staff members to excuse themselves as and when they discuss sensitive matters.

5.1.5 Conflict of Interest Rules

Under section 12 of the 1996 Telecommunications Act, a board member that has an interest in a matter before the board must declare his or her interest to the full Board. The Board then decides whether the Board member should be recused from discussions and/or from voting. Although board members have declared certain interests, the board has never decided to recuse one of its members. During the GSM licensing process, for example, board members declared whether they had any relatives who were members of the five consortia that bid on the two GSM licenses. Three of the five consortia were short-listed for the award of two GSM licenses. Some board members had siblings who were shareholders in the two consortia that had not been short-listed. These board members declared that they were aware of their siblings' financial interest and that they would not derive any benefit from such an interest, as such there was no need for their recusal.

5.2 Staff

The Executive Chairman was appointed to head BTA in December 1996. His first priority was to

Box 4: Declaration of Interest by Board members

Article 12 of the Telecommunications Act states:

- 1 If at any meeting of the Board a Board member is aware or becomes aware that a matter which affects him beneficially directly or indirectly is to be discussed, he shall forthwith declare, to the Board, his interest in the matter and the Board may, if it considers it appropriate, require him to recuse himself from the discussion on that matter.
- 2 Any Board member who fails to comply with the provisions of subsection (1) shall be guilty of an offence and shall be liable to a fine of not less than BWP 10 000.00 but not more than BWP 30 000.00.

recruit staff for the new regulatory authority. Although the government had already published hiring notices for BTA staff, the Executive Chairman cancelled these until he could develop staff rules and establish policies on salaries, medical benefits and other perquisites. The same Swedish advisor that had helped to develop Botswana's telecommunication policy and legislation served as an advisor to the Executive Chairman from 1996-1998. In addition, Mr Lekaukau visited the United Kingdom's Office of Telecommunications (OFTEL) and the Swedish regulatory authority. He used the first Annual Report of OFTEL to provide a model for the organizational structure of the BTA.

BTA's first three staff members were not recruited until mid-1997. A second Swedish consultant from the Swedish regulatory authority was also retained to provide technical advice for about one year. In October 1997, the first staff members were sent to a ten-week training course on telecommunication regulation at the City University of London. The three original staff members worked closely with each other, consulting on all matters. Their first priority was to license GSM operators.

More staff members were recruited in October 1998, after the two mobile operators were licensed and the Authority turned its attention to licensing commercial radio station operators. By 1999, the level of staff increased to about 25 to 30 people.

Founder members of BTA



Recruited in the following order; Executive Chairman of BTA, Mr C. M Lekaukau (Left), Ms A.M. Ncaagae (sitting) and D.Z. Baakanyang (right). The latter two were recruited as administrative back up to the Executive Chairman.

Photo taken during the first celebration of World Telecommunication Day by BTA 17 May 1999.

Source: BTA.

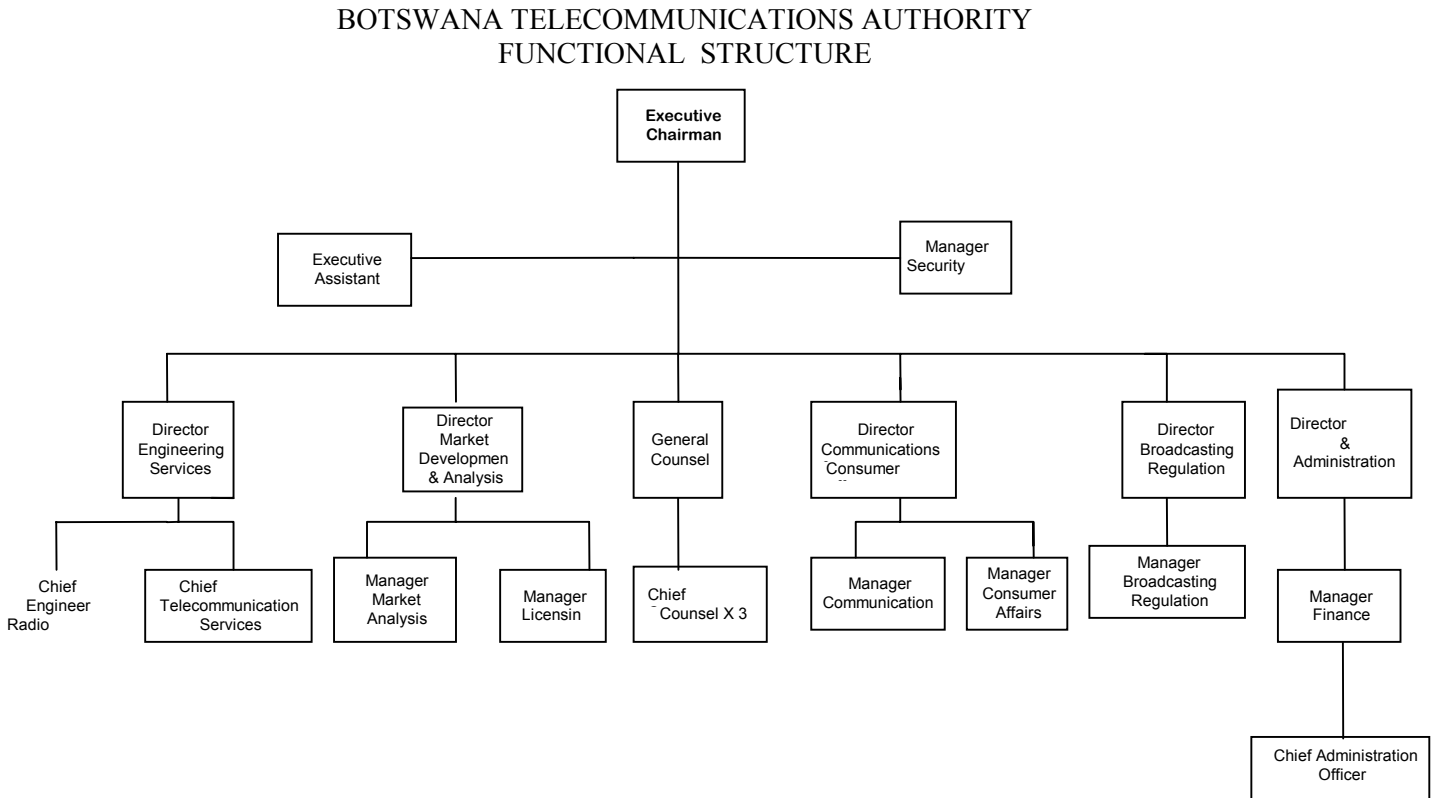
In 1997, BTA's goal was to achieve a staff of about 20-25, including professionals and support staff. The Swedish consultants had recommended that BTA keep its staff lean and outsource most functions. But it soon became clear that their ranks needed to be enlarged. BTA hired the consulting firm NERA to review its structure. NERA concluded that BTA would be unable to fulfill the mandate of the Telecommunications Act of 1996 without more staff, and recommended the staffing be increased to between 50-60 people and that the structure be re-organized. NERA prepared job descriptions for all posts.

BTA was in the throes of a recruitment drive at the time this case study was conducted. Until BTA moved to its new headquarters, all recruitment efforts were stalled. There was simply no place for new staff to work. As part of its recruitment drive, BTA planned to recruit a Director for Finance and Administration, a post that has remained vacant since it was created in 2000. During the interim, the Director of Communications and Consumer Affairs has assumed responsibility for administration functions in addition to his mandated portfolio. A manager of finance is in charge of financial matters on advice of outside consultants. Likewise, the current Director of Engineering Services was recently promoted, leaving his former post vacant. His promotion followed on the heels of the resignation of the former director, the only professional ever to leave BTA. Similarly, the market development and analysis department plans to recruit two senior market analysts.

5.2.1 Staff Profile

As of July 2001, BTA had a total staff of 52 people, including professional and non-professional staff. Two of these professional posts were vacant and six people were abroad for training. BTA staff includes 41 professionals and 11 support staff. Women hold 14 or one-third of the profession posts. These include two managers in the market development and analysis group, two attorneys in the office of general counsel and the manager of consumer affairs. Women hold six of the ten administrative posts. In total, 24 out of 52 (or 46%) staff members are women. The staff is also young. The directors' ages span from 38-54, and the remainder of the staff is much younger.

Figure 6 – BTA’s organization chart



5.2.2 Staff Organization

BTA staff is currently divided into six main groups, each headed by a director and a general counsel in respect of legal services. The six main groups are:

- Engineering Services;
- Market Development and Analysis;
- Broadcasting Regulation;
- Communications and Consumer Affairs; and
- Finance and Administration¹⁷.
- Legal Services

Each of the six main groups is further divided into units headed by a manager. For example, the engineering services group includes a manager of telecommunications services and a manager of radio services. The office of general counsel is headed by an attorney and includes three other attorneys. Given that the current

Executive Chairman is also a lawyer, nearly 10% of BTA staff members are lawyers (see Figure 4, BTA Organizational Chart). The Executive Chairman says, “Regulation is all about a balancing of the scales of justice and as such lawyers are some of the ideal candidates for regulatory positions.”

Some groups also include additional levels of less senior professional staff. The engineering services group includes two senior engineers, two engineers and four telecommunication technicians. The broadcasting services group includes a director, a manager for broadcasting regulation and an assistant broadcasting regulation officer. The communications and consumer affairs group currently employs an acting manager for communications, a recently recruited manager for consumer affairs, a communications officer (Information Technology) and two assistant communications and consumer affairs officers.

BTA’s support staff includes switchboard operators, secretaries, drivers and messengers, office cleaners and security staff.

¹⁷ At the time of this report, the post of director of finance and administration was vacant.

The functions of the Broadcasting Regulation unit are described in Section 3.7. The Finance and Administration unit is responsible for preparing the BTA budget as described in Section 4.3. The work of the Engineering Services, Market Development and Analysis and Communications and Consumer Affairs and the Office of the General Counsel follows.

5.2.2.1 Communications and Consumer Affairs group

The Communications and Consumer Affairs group was created in April 2000. The mission of the Communications and Consumer Affairs group is to promote consumers' understanding and awareness of their rights in a competitive market, to resolve consumer complaints, to ensure quality of service and to promote the corporate image of BTA both in Botswana and abroad.

BTA is just beginning its efforts to make consumers aware of their rights. At the time of this report BTA had only very recently hired staff to implement its consumer affairs goals. BTA is preparing pamphlets to inform consumers about their rights and has published advertisements in local newspapers to promote BTA.

Because it has not had sufficient staff to address consumer complaints, BTA encourages consumers to exhaust all other avenues before bringing service complaints to the agency. When consumers bring their complaints to BTA the agency gathers evidence from the consumer and writes to the service provider, advising of the complaint and requesting that the service provider resolve the issue. BTA officials also meet with the service provider. A copy of correspondence between BTA and the service provider is provided to the consumer. BTA handled a series of consumer complaints arising from BTC's new billing system (see Section 3.8). Although BTC eventually promised to refund customers for over-billing, BTA insisted that BTC also provide an explanation to accompany the refund.

BTA has also included budget appropriations to allow officials to travel throughout the country to meet with consumers to try to raise their awareness of their rights. The new manager of Consumer Affairs plans to launch projects to work with disadvantaged groups such as women

in society, the hearing impaired and other physically challenged people. In recognition of the special needs of physically challenged people, the new BTA building includes a wheelchair-accessible ramp and special restrooms to make sure the building is accessible to all people.

5.2.2.2 Market Development and Analysis Group

The mission of the Market Development and Analysis group is to promote the development of telecommunication services in Botswana through the licensing mechanism and providing advice on policy issues. The group includes a Manager for Market Analysis and a Manager for Licensing. The Licensing department receives applications and provides recommendations to the Board and the Executive Chairman. A full description of BTA's licensing activities is included in section 7). The group's policy advice is taken to the Minister of Works, Transport and Communications as necessary. The group studies and analyzes trends in tariffs, interconnection and other issues and collects quarterly data from BTC, Vista and Mascom on their customer base, prices and market plans. The group also handles complaints between operators. Complaints from end users are directed to the Consumer Affairs department. The group currently includes four professional staff, but is recruiting two new members

5.2.2.3 Engineering Services Group

The Engineering Services group is responsible for radio communications including frequency spectrum management, equipment type approval and ensuring that telecommunication standards are implemented. BTA has not yet performed quality of service or radio interference monitoring due to the lack of human resources and necessary equipment. It will begin monitoring radio frequency once it acquires monitoring equipment through the tender described below.

a) Type Approval

BTA's mandate to type approve equipment is provided in the Telecommunications Act of 1996 and the Telecommunication Regulations of 1997. Under the Act, BTA's type approval activities are designed to protect the public network. Type approval is required for switching equipment, VSAT and fixed line

handsets. Mobile handsets are exempted. The Act does not cover mobile networks. BTA will propose that the Act be amended to cover type approval for mobile networks. BTA also does not require type approval for network equipment used by licensed operators. Because the purpose of BTA's type approval activities is to protect the public network, BTA does not expect operators would risk doing harm to the network.

Type approval fees are levied as a one-time fee and cost an average of BWP 1000 (approximately 175 USD). Because there are no test facilities in Botswana, BTA accepts equipment that has been approved in any administration in Region 1 of the ITU (Europe and Africa). BTA type approved 56 different kinds of terminal equipment in 1998-1999.

b) Quality of service

The operators' licenses include quality of service (QoS) requirements, but these are not currently well defined or enforced. QoS is also not covered in the 1997 Telecommunication Regulations. BTA will propose that QoS issues be codified, making QoS a statutory or regulatory obligation that service providers will be required to perform. BTA also noted that it also lacks guidelines on QoS enforcement and does not own QoS monitoring equipment.

One operator recommended that BTA do more to measure quality of service and offered to help establish testing mechanisms. The operator felt that it could use this data as a marketing advantage to prove it provided better quality of service.

c) Numbering

BTA's numbering functions are specified in the Telecommunications Act. BTA instituted a new numbering scheme to systematically, but gradually replace the current six-digit numbering scheme for fixed-line services to a seven-digit scheme. In July 2001, the first village implemented the 7-digit scheme. BTA plans to implement the numbering change over two years in order to give itself time to respond to any problems or errors. It has published a schedule for the changeover up through March 2002. Gaborone will be the last locale to implement the numbering change.

Incumbent operator BTC allocates fixed-line numbers to its own subscribers. BTA performs all mobile number allocation. All mobile num-

bers start with the digit "7" and are eight digits long.

d) Frequency Planning Management

BTA's frequency planning management functions are specified in the 1996 Telecommunications Act. Following the tender for the development of the national radio frequency plan issued by BTA in November 1999, Intech AS of Norway was awarded the tender. The Intech consultants began working on the project one year later. BTA issued a press release and published notices in the paper to solicit comments on the national frequency plan. BTA also notified major users, all operators, radio stations and other concerned parties about the plan. The Intech consultants interviewed stakeholders, collected data in Botswana and visited the Independent Communications Authority of South Africa (ICASA) to help develop the Botswana radio frequency plan. The final report was expected at the time this case study was being prepared and will be circulated to stakeholders for comments before it is finalized.

BTA is also preparing a tender to provide an automated frequency management system to monitor spectrum interference. Once the tender is completed, BTA will acquire monitoring equipment to be used nation wide. BTA realizes that it will be required to recruit additional staff to perform these tasks.

In the first six months after BTA was established, BTC continued to perform frequency management. BTA sent applications for frequency allocation to BTC, and the incumbent returned the request to BTA for verification. After six months, BTA took over responsibility for frequency allocation, in accordance with the Telecommunications Act. BTC was reluctant to relinquish this task because it had been able to acquire additional frequency for its own use. BTC used a simple card system to note spectrum allocations. BTA has created a frequency database.

5.2.2.4 The Office of General Counsel

The Office of General Counsel performs three main functions. It is the legal advisor to the organization. In this capacity, it advises the Board on whether it is acting within the scope of the Telecommunications Act and Regulations, and also ensures that it complies with procurement and hiring requirements. The General

Box 5: BTA's Conditions of Service

The rights and obligations of the Telecommunication Authority and its employees are stated in the Conditions of Service, which came into effect in 1997. They cover various issues such as appointments, probation, promotion, salaries, performance management, working hours, leave, transport, travel and travel allowance, housing and rents, code of conducts, disciplinary policy and procedure, grievance procedure, termination of employment, pension and gratuity, benefits and allowances.

The code of conducts specifies the behavior the Authority expects from its employees on several aspects, from general to political activities. Below are stated some examples of these rules.

On a general level, article 13.1.1 states that, "The Authority is a public body, and expects staff to conduct themselves at all times in a manner which preserves the good name of the Authority, its political neutrality, credibility and independence."

On the issue of secrecy, article 13.4.1 stipulates that, "all information obtained during the course of employment with the Authority is confidential, and the strictest secrecy shall be observed by all employees in regard to information acquired during the course of their duties. Employees shall not, during the course of their employment with the Authority or after leaving the service of the Authority, communicate, or allow to be communicated, to any unauthorized person, any information made available to them in their capacity as employees of the Authority, unless instructed to do so by Authority's management, or a Court of Law."

Article 13.6.1 deals with erasures and computer records, "No employee shall temper with, or make erasures to, any books, papers, computer records, or any other permanent record, or working papers of the Authority without authority. The Authority may take disciplinary action against any employee found to have made such amendments or erasures if, in the opinion of the Authority, such amendments or erasures are misleading, whether or not it was the intention of the employee to mislead."

Concerning press statements, interviews and publications, article 13.8.1 stipulates that "except with prior authority of the Executive Chairman, no employee of the Authority shall issue any press statement, or take part in any public debate or discussion, on any matter relating to the business of the Authority or purporting to express the views of the Authority on any matter."

The rules applicable to receiving visitors are laid down in article 13.9, "Employees are discouraged from receiving personal visitors on Authority premises; and such visits should be kept as short as possible."

The question of gifts is covered in section 13.13, "Employees of the Authority shall not accept, or solicit, gifts, fees or hospitality from any person with whom they have official dealings, either in respect of services rendered or in exchange for services to be rendered. Any offer of such gifts, or similar considerations, must be reported promptly to the Executive Chairman."

Article 13.13.2 states that "From time to time staff may be offered small gifts of a seasonal nature and as acceptance of which may result in a conflict between their personal interests and their duty to the Authority such gifts may only be accepted provided they are modest and are referred to the Executive Chairman."

Article 13.13.2 states that, "Monetary gifts must not be accepted and in all cases the employee's Head of Department must be informed."

Counsel also serves as the secretariat to the Board, organizing and attending all Board meetings and preparing minutes for these meetings. The bulk of the General Counsel's work, however, is the performance of regulatory functions, including the drafting of licenses, dispute settlement, and any rulings issued by the Authority. While the Office of the General Counsel works closely with other departments in the performance of its regulatory functions, it performs all legal drafting.

Certain decisions taken by BTA must be "gazetted" or published in the official government publication. These include service provider licenses and the 1997 Telecommunication Regulations.

5.2.3 Staff Rules

All BTA staff are considered parastatal staff and are subject to the BTA Conditions of Service, a 52-page document detailing the rules governing

staff appointments, promotion, salaries, working hours, leave time, travel, housing, and a code of conduct that includes disciplinary grounds and procedures. The code of conduct requires staff “to conduct themselves at all times in a manner which preserves the good name of the Authority, its political neutrality, credibility and independence.” (BTA Conditions of Service, Section 13.1) No other general civil service rules apply to BTA staff although there are general common law principles that protect all government employees from civil and criminal liability for actions taken in the course of their professional activities.

All professional staff and secretaries are considered “permanent and pensionable,” meaning they are hired for an indefinite period. Members of the support staff, such as office cleaners and drivers, are hired under fixed period contracts.

The Code of Conduct, stated in the Conditions of Services (See box 3) mandates that employees treat all information obtained during the course of their employment with the BTA as confidential, a duty that continues even after employees leave BTA. BTA employees are further required to sign a Declaration of Secrecy. In keeping with these rules, BTA maintains tight security over its new building. No one can enter the staff office area without access to an electronic device to open the door. Meetings with the private sector occur only in special conference rooms, away from locations where sensitive documents may be stored.

Employees may not accept gifts from people with whom they have official dealings. Any offer of such gifts must be reported promptly to the Executive Chairman.

All staff members appear to take these rules very seriously. They have also helped BTA to earn respect and credibility. For example, BTA’s first two staff members were recruited directly from BTC. Although some market players and analysts advise against regulatory authorities hiring directly from the incumbent, BTA’s staff rules and other measures helped to ensure against any unfair treatment of new market entrants or favoritism toward the incumbent. Not only do the strictly enforced Conditions of Service provide clear guidelines to staff members, these early recruits obtained a good grounding in their relations with their former

colleagues in the ten-week regulatory training course they attended soon after being recruited. In addition, BTA requires that all official correspondence with the operators be made in writing, and staff members may be required to prepare draft letters for approval and signature by the Executive Chairman in some cases.

5.2.4 Salary

BTA staff salary packages are considered to be more attractive than those in government and perhaps competitive with some private sector organizations. Although BTA has no official information on the salaries earned by employees of the private sector operators, the flood of applications BTA has received from these operators may suggest that BTA offers a better salary and benefits package. In addition, no BTA staff has yet left to seek employment with the operators, unlike regulatory authorities in other countries.

BTA offers a generous benefits package to its employees, including a medical aid scheme covering 80% of monthly subscription costs and unlimited medical coverage and life insurance. The government’s medical package, by contrast, pays only 50% of the monthly subscription charge. More senior staff members also receive car allowances of up to 15% of monthly salary and telephone allowances of BWP 450 per month (79 USD) and housing guarantees. And, as part of BTA’s policy of home ownership, the Authority purchased 22 land plots to sell to senior staff members to build homes upon.

5.2.5 Recruitment

The BTA Board must approve all requests to create additional posts. However, the Executive Chairman is given the flexibility to modify staff allocations from time to time based on operational exigencies as long as the total number of staff remains within the approved ceiling. Once the Board gives its consent to create a new post, BTA advertises the post in the local newspapers and a committee of senior officials is composed in order to conduct interviews and make recommendations to the Executive Chairman whose decision is final. The Minister of Works, Transport and Communications does not interfere in hiring or salary decisions. The recruitment process takes about two months. To date, BTA has only hired Botswana nationals except one secretary who

has a permanent residence. BTA's current staff was recruited from a variety of sources including BTC, the MWTC, other government offices, other parastatals such as Botswana Railways and the University of Botswana, and recent university graduates.

5.2.6 Training

BTA has devoted enormous resources to training. According to the 2001 BTA Annual Report, "training in the BTA has become the lifeline of the Authority's operation. A lot of officers have to be reoriented into [the new and ever changing] telecommunication regulatory sector by taking courses that are inline with this field."

While BTA has developed a highly qualified professional staff, none of the staff joined BTA with the skills they now demonstrate. BTA believes that professional staff should operate on a minimum qualification of a Masters Degree. Staff is given an incentive by sponsoring training programs to obtain these qualifications. BTA maintains a high commitment to providing overseas training because it believes that overseas institutions can produce staff with the skills required by the Authority.

The majority of the senior level staff has been sent abroad to receive their Masters Degree. All directors now have earned their Masters Degree. Six of its 52 staff members were abroad (either in the U.S. or U.K.) pursuing Masters Degree programs at the time of this case study. Five staff members were enrolled in Masters level programs in the year 2000. For example, one staff member received her Masters in Communications Policy and Regulation at the University of Westminster in the U.K. In addition, BTA sends other staff members for local or regional training. During the field research for this report, several BTA staff accountants were on temporary leave attending accounting courses and five other staff members have participated in regulatory training classes in South Africa at the Link Center of the University of Witwatersrand.

Any staff members who pursue advanced degrees paid for by BTA are required to continue their employment by BTA for a number of years commensurate with the duration of the course.

In an effort to increase the BTA Board's level of expertise, the Executive Chairman has invited board members to participate in regional and international conferences to help them keep abreast of changes in the telecommunications sector. Several board members, for example, attended the ITU Development Symposium for Regulators in November 2000.

5.2.7 Staff Turnover

BTA has enjoyed very low staff turnover in marked contrast to most other regulatory bodies worldwide and other government agencies in Botswana. Since its creation in 1996, only two staff members – one professional and one assistant – have left the organization. BTA attributes this low turnover rate to its attractive salary and benefit packages as compared to other government agencies and the local private sector. In addition, the low turnover rate may be partially explained by high unemployment rates in Botswana. BTA has also not experienced the problem of staff leaving to move abroad.

5.2.8 Outsourcing

BTA engages outside consultants when its own staff lacks sufficient competence. In addition to the two Swedish consultants who worked intensively with BTA in its early years, BTA hired other consultants to conduct the tender for the two GSM licenses issued in 1998 as well as other projects. Sometimes the consultants hired by BTA work on site in BTA's offices, sometimes BTA staff works with the consultants in their offices. BTA has indicated that it intends to continue outsourcing in order to keep its staff numbers at a reasonable level.

6 General Regulatory Powers

6.1 Rulemaking and Public Consultations

The 1996 Telecommunications Act grants BTA rulemaking authority. Section 26 reads, "The Authority may make Regulations providing for any matter which may be prescribed or provided under this Act, or which otherwise relates to the administration of the Authority". In addition, Section 18 of the Act requires BTA to publish pricing principles to be applied in the setting of tariffs, section 21 authorizes BTA to promulgate

type approval regulations and section 43 requires BTA to make regulations governing the use of frequency bands.

The BTA Board promulgated the 1997 Telecommunication Regulations in June 1997, just six months after BTA was created, establishing rules on various technical issues including numbering, property access, radio communication equipment, testing and type approval. There was no public consultation as part of this particular rulemaking process and it is not a requirement of the Act. BTA was under extreme time pressure to promulgate rules governing its technical regulatory mandate, and decided that a public consultation would take too much time. In addition, BTA's ability to hold a public consultation was hampered by the fact that it had only a skeleton staff that was busy trying to prepare a tender for two GSM licenses, the lynchpin of Botswana's sector reform program.

As it has added additional staff and developed expertise, the Authority has also moved toward a policy of public consultations. In early 2000, BTA prepared a consultative document entitled "Guidelines and Principles for the Pricing of Telecommunications Services." This document covers the pricing of fixed and mobile voice services offered to the public and interconnection pricing between operators. The document was circulated to industry and the general public in September 2000. BTA has received a series of comments from private sector members, including the major operators and one consumer. Originally, BTA intended the public consultation to end in November 2000 and scheduled a seminar in February 2001 to allow interested parties to present their views and comments. However, due to the lack of public input into the consultative process, BTA decided to postpone the hearing until June 2001. Again, when there was no response, it moved to postpone the meeting to later in the year. At the time this case study was being prepared, BTA was trying to muster a response from consumers, business users, academics and other interested parties. BTA is also considering inviting other regulators and organizations such as the Commonwealth Telecommunications Organization (CTO) to comment. BTA's goal is to produce a recommendation that will have lasting impact, rather than prepare guidelines that require modification after one year. If BTA succeeds, the public hearing will mark the first public hearing on a BTA rulemaking exercise.

BTA has requested costing information from BTC in order to process the incumbent's proposal for tariff rebalancing. The costing information is forthcoming and in the interim the BTA has informed BTC that the planned tariffs would not be approved pending the submission of costing data.

BTA's work in developing a national radio frequency plan has also received significant public input as described in Section 5.2.2.3. All operators confirmed that BTA officials are also readily available for informal consultations. (See Section 8 on Transparency).

6.2 Arbitration and Dispute Resolution

Article 19 of the 1996 Act authorizes BTA to resolve "any dispute that may arise between licensees, between licensees and other service providers, and between licensees and members of the general public." In addition, Article 47 authorizes BTA to resolve interconnection disputes between operators. BTA has taken an active role in dispute resolution. BTA resolved the country's first interconnection dispute after licensing the nation's two GSM operators. Under the Telecommunications Act, an operator must receive consent to interconnect from the licensed network operator before it will be licensed. Each of the GSM operators had included proposed interconnection rates in their license tenders, and BTC submitted an interconnection rate counter proposal. In resolving the dispute on 14 February 1999, BTA reduced the rates that had been proposed by BTC by 10% in an effort to find a middle ground between BTC and the mobile operators. It ruled that interconnection rates must comply with the principles of being cost-based, objective and transparent.

The operators have been operating under the terms of the BTA-set rates since February 1999. During the field research for this case study, the operators were attempting to negotiate new terms and conditions for interconnection. On 12 June 2001, BTA received a letter from BTC and Mascom declaring a dispute. According to BTA, the letter does not set forth in clear terms the issues on which the parties disagree or identify the issues on which they would like the regulator to rule. BTA, in keeping with its light touch regulatory philosophy focused on key regulatory

priorities, believes it is premature for it to agree to resolve the dispute. It has suggested that the operators return to the negotiating table. The Authority is of the opinion that business people should be able to reach their own agreements, and that the parent companies of the mobile operators well understand the principles of transparency and objectivity from their operations in other countries. Since the operators have uniformly called for BTA to take a more active role in the latest interconnection dispute, it is likely that pressure will continue to mount for BTA to intervene.

BTA has also resolved disputes between BTC and two ISPs seeking leased capacity to provide service to their customers. When one ISP approached BTC for a leased line so that it could provide Internet service to a customer, BTC refused. Instead, the incumbent's ISP subsidiary offered to provide service to the customer itself. In another case, BTC offered to provide a leased line to an ISP on condition that that it agreed not to offer the leased line for resale. BTA issued two rulings in 2000 under Section 19 of the Telecommunications Act of 1996 directing BTC to provide leased line capacity to the ISPs. The Authority published its full rulings in all major newspapers in Botswana.

BTC appealed the ruling to the High Court, but has indicated its intention to withdraw the appeal. BTC eventually signed service level agreements with the ISPs in February 2001. While BTC was obviously not pleased by the decision, BTA has tried to impress upon BTC the fact that it should consider itself a wholesaler and try to increase that business, rather than trying to compete with other ISPs offering retail services. The leased capacity decision means that ISPs can now build their own infrastructure and provide connectivity and networking to their customers. BTC explained that it had tried to impose restrictions to protect its business line. The incumbent was concerned that if BTA were to allow ISPs to offer voice, it will lose its customer base.

6.3 Enforcement

Under the 1996 Act, BTA's decisions take effect as soon as they are made and remain in effect until suspended on appeal. In practice, BTA has shown greater flexibility. For example, BTA did not insist that BTC implement the ISP leased

capacity ruling during the appeal, and the ISPs did not ask BTA to enforce implementation.

The Telecommunications Act includes no clear provision authorizing BTA to impose a fine for purely regulatory infractions, such as tariffs. Currently, if an operator were to charge tariffs without seeking authorization from BTA, the Authority's only recourse is to refer the matter for criminal prosecution. BTA is working to convince the government that it should also be expressly empowered to impose fines.

BTA has assumed the power to impose fines, however, by specifying financial penalties in the operators' licensing conditions. The GSM licenses, for example, include financial penalties for a service provider's failure to meet network rollout obligations. Nevertheless, BTA seeks to have the Telecommunications Act amended to provide a clear grant of statutory power for BTA to impose fines. This would eliminate any questions regarding its ability to impose fines.

To date, BTA has never tried to impose a fine on any of the operators, preferring to resolve problems through conciliation or other means. The preliminary view held by BTA was to nurture the new liberalized dispensation, i.e. incentive regulation rather than punitive regulation.

BTA is empowered under section 36 of the Act to suspend, revoke or impose additional conditions on licensees should they contravene the Act. BTA has so far never attempted to invoke this power. There has not been any breach requiring such a sanction, and BTA realizes that it is extremely difficult to suspend licenses. If BTA were to invoke section 36, it would be required to provide written notice to the licensee, allow 14 days at any time for correction or show cause why BTA should not take action in breach of the Act. Any changes in license conditions following the hearing would have to be "gazetted" and published in two newspapers of national distribution. While BTA has had occasion to write to a licensee asking that it correct a licensing infraction, the licensee complied with BTA's request.

Like its limited power to impose fines, the Telecommunications Act merely authorizes BTA to monitor but not to enforce competition. If BTA finds anti-competitive activities, under the Act, it should refer these activities to the

Attorney General. There is currently no competition authority in Botswana.

Because BTA is not empowered to enforce competition, it relies on other provisions of the Act to resolve and enforce breaches of the competition rules. For example, if BTA had the power to enforce the competition provisions of the Telecommunications Act, it could have decided the ISP leased capacity case on competition grounds. BTA instead ruled on the grounds that BTC has an obligation to provide services to whoever needs services.

In general, BTA's regulatory philosophy is based on trying to nurture the market players. It recognizes that people with old mindsets need to be brought along slowly. Rather than forcing market players through the imposition of fines, it tries to persuade operators to cooperate. For example, when the incumbent failed to provide cost information to justify proposed new tariffs, one senior BTA official explained to the incumbent that if it did not provide the information, BTA would be forced to make a decision without their input. BTA also assured the operator that it would not provide confidential information to competitors.

6.4 BTA Immunity

As a parastatal, BTA can sue or be sued in its own name – and has been. As just stated, BTC initiated an appeal in the High Court against BTA's leased capacity ruling. BTC also threatened to appeal BTA's GSM license award decision. BTA hires outside counsel to represent it in these cases. BTA, however, includes licensing conditions that indemnify the Authority from liability with respect to the Authority's action in implementing license conditions.

7 Licensing

BTA is one of the rare regulatory bodies that has been given almost complete freedom to decide which services are to be licensed, how many licenses should be granted for each service and which operators are to be awarded a license. In many countries, the regulatory body may conduct the licensing process, but only after key issues such as the number of licenses to be awarded or the types of services to be licensed have been taken by the Ministry or some other governmental body. All the operators believe

that BTA has exercised complete independence in each of its licensing awards. BTA's licensing power has removed licensing decisions from the political arena.

BTA's licensing decisions are guided by the Telecommunications Policy and Act, which set forth the framework for the introduction of competition in Botswana. Botswana's Telecommunication Policy does not recommend full competition. While it does promote competition, it maintains a certain level of prudence with respect to the health of incumbent operator BTC. BTA's licensing practices have reflected the political will inherent in the Policy.

Under Section 40 of the Telecommunications Act, the Minister's approval for BTA license awards is required only if BTA were to grant an exclusive license. The policy underlying section 40 forces BTA to be pro-competitive and is in accordance with the Authority's mandate to promote competition. If BTA were to try to limit competition – through the granting of an exclusive license – BTA would be required to convince the Minister of its reasons for seeking to limit competition.

BTA has taken a very pragmatic approach to licensing. Because the nation's first priority was licensing mobile cellular operators, BTA undertook this process as its top – if not exclusive – priority once it had recruited and trained an initial skeleton staff. Licensing commercial radio stations was its second priority. Although some ISPs were operating in Botswana at the time its limited staff resources were focusing on these top priorities, BTA allowed ISPs to operate in the absence of a license, only turning to that process once it had sufficient staff resources. Under the doctrine of regulatory forbearance, BTA has further opted not to license certain services, but authorize them through a simple application. The Authority did this in the case of the Red Cross, exempting it from paying any license fees for its radio communication services.

7.1 The GSM Licensing Process

BTA announced the tender for two mobile cellular licenses in newspapers located both in Botswana and overseas. Each tender included the provision of country wide mobile telecommunications services based on GSM technology to be provided by a consortium of

local and international players. Each license included equal coverage rights in the densely populated area of Botswana, as well as different but complementary mandatory coverage areas in more sparsely populated regions. Each interested consortium was invited to offer additional areas to be included in the mandatory coverage area to maximize total coverage for the benefit of end users.

Twenty companies paid BWP 1,000 (approximately USD 175) to purchase the invitation to tender documents. The tender package included detailed descriptions of coverage areas, numbering schemes, spectrum to be granted, location of mobile switching centers and indicated that BTA would formulate tariff structures after considering proposals by those that bid. It also outlined the terms and conditions for the licenses, including a one-time fee of BWP 1 million, an annual radio license fee of BWP 300,000, an annual fee equal to 5% of net turnover and a commitment on the part of BTA not to license additional countrywide mobile telephony licenses for five years.

The invitation to tender identified a list of criteria on which the award of the license would be based and indicated the weight to be given to each criterion. Coverage was given the highest weight, accounting for 45 out of a total of 100 points. The GSM license award criteria were:

- Coverage (45 points)
- Overall experience (10 Points)
- Experience outside country of origin (5 points)
- Level of Botswana ownership (15 points)
- Roll out speed (10 points), and
- Creativity, including strategic ownership, local employment policy, training, technology transfer and service innovation (15 points).

The invitation further noted that:

the evaluation of tenders will essentially be based on the total coverage offered by the various tenderers and the resources to be made available to provide that coverage together with the viability of their business plans. (Invitation, Section 3).

Each consortium was required to include local partners from Botswana and provide appropriate

financial guarantees. Each consortium was also required to provide a comprehensive and verifiable statement from the consortium members of international experience and resource capability, including at least 50,000 mobile subscribers.

BTA held a clarification meeting on 12 June 1997 to answer any questions posed by the companies that had purchased the invitation to tender. All questions were required to be submitted in writing and BTA answered them in the meeting without identifying the source of the question. Parties were prohibited from contacting BTA following the submission of their bid unless requested by BTA to do so.

Five consortia submitted bids, paying a non-refundable tender fee of BWP 20,000 (USD 3,500) by 31 July 1997 and submitting their tenders by 7 August 1997. BTA opened the tenders on the same day, and the members of the consortia had the right to attend the opening. BTA did not invite the public to attend either the clarification meeting or the tender opening meeting. BTA is currently evaluating whether future meetings of this type would be open to the public.

Following submission of the tenders, BTA evaluated each of the proposals based on the relevant criteria. BTA hired Smith System Engineering from the U.K. and CSIR consultants from South Africa, who in turn used in-house expertise as well as outsourcing expertise from GERS Project Management and Engineering Services also from South Africa, to assist it in evaluating the license tenders and to prepare the shortlist of potential licensees. BTA did not publish the results of its evaluation, but did identify three consortia for inclusion on a shortlist of potential licensees. The three short-listed consortia were invited to a meeting in Pretoria at CSIR to negotiate terms and conditions of the licenses. BTA, its consultants and members of the law firm of Webber Wentzel Bowens met each company individually. After meeting with each, they called the companies back to validate certain issues raised in meetings with the other consortia. Following these meetings, BTA awarded two GSM licenses, one to Mascom, the other to Vista. The whole process took approximately nine months, from the time of application to award.

BTA held a press conference to announce the GSM license awards.

BTC, who was not awarded a license, was not pleased by the outcome of the licensing process and complained to the highest levels of government to have the decision overturned. The Minister of Works, Transport and Communication advised BTC to take the matter up with BTA. He informed BTC that he had no intention to interfere with BTA's decision and recommended that if BTC were not satisfied, it should take the matter to the High Court.

Mr Lekaukau was a former business partner with some of the investors in one of the companies that became a minority shareholder in the consortium that won the license granted to Vista. In fact, his former business partners formed a new company – in which he had no involvement – before the tender process was even initiated.¹⁸ After the license award was announced, mean-spirited newspaper stories were published alleging that he had had a financial stake in Vista. BTA held a press conference and Mr Lekaukau explained his past financial dealings with the investors. He also explained that the evaluation of the tenders had been conducted by BTA staff members and external consultants. Mr Lekaukau was briefed on the evaluation conducted by his staff and the consultants during a Board meeting in which he took part. The Board later published an article in the media to clarify that he had no financial interest in any of the consortia.

BTC remains extremely interested in obtaining a GSM license, but the current licensees enjoy a duopoly until 2003. BTC has therefore attempted to buy into one of the operators. To date, its negotiations have been unsuccessful. The incumbent believes it will fare better once it is privatized.

7.2 Commercial Radio Licensing

Radio licensing was the Authority's second priority. In the early 1990s BTC was both the operator and the regulator. Although it was empowered to issue licenses to commercial radio stations, it refused to do so. Its refusal was

challenged in Court. BTC denied that it had the power to issue licenses, but the Court ruled that it did. BTC, however, never issued the licenses. When BTA came into existence, there was a pent-up demand for radio licenses, and BTA undertook the process as an urgent matter after the award of the GSM licenses.

7.3 International Data Gateway and ISP Licensing

At the time of this report, BTA had awarded six international data gateway licenses (for VSAT data services). These awards followed an application process rather than a competitive tender. BTA indicated that it has never refused an application, and that there are no limits on the number of international data gateway licenses it would award as long as the applicants meet BTA's financial criteria.

One international data gateway licensee noted that the license application process was not easy, that it had to meet with BTA officials on several occasions to explain and review its business and technical plan. Despite the complaint, the licensee noted that the time the licensing process took was justifiable, a total of 3 months, and the regulatory fees modest. An international data gateway license costs a one-time BWP 10,000 charge. In addition licensees pay BWP 3,000 every year in regulatory fees. There is no requirement that VSAT operators pay a percentage of net revenue like the telecommunication operators. In addition, one licensee noted that a VSAT dish cost BWP 800,000 (approximately USD 136,000).

There were already a handful of ISPs operating in Botswana at the time BTA was created in 1996. Some of the ISPs approached BTA for authorization. BTA allowed the ISPs to operate without a license until 1998. Once BTA had completed the GSM license tender, it awarded all existing ISPs a license. Like the international data gateway licenses, ISP licenses are issued upon application.

One ISP that noted that it would have applied for an international data gateway license if it had known that BTA was accepting applications. The ISP complained that BTA should have announced that these licenses were available for award, rather than informally indicating to those companies that expressed interest in providing international data gateway services that they

¹⁸ In fact, information about the make up of all companies is available for a BWP 5 fee at the office of the registrar of companies.

should submit an application. Although BTA did not publicly announce that it would make these licenses available, it did issue a press release once it made the initial international data gateway license award. Anyone who had been reading local papers would have seen the announcement and learned that such licenses were now available. Because of its small staff, BTA believes that market players have a duty to enquire and keep themselves informed about the market.

Moreover, complaints like this are likely to be remedied as soon as BTA launches its website. At the time this report was prepared, the IT Communications Officer had created a website, and its launch was simply awaiting the approval of the Chief Executive. The website will include the Telecommunications Act of 1996, the Telecommunication Regulations of 1997, notices of the types of licenses BTA issues and their application procedure, a roster of all licenses BTA has issued, press releases and other key information on telecommunication regulation in Botswana. In the meanwhile, in accordance with Section 41 of the 1996 Telecommunication Act, BTA maintains a licensing registry. Anyone can visit BTA headquarters and, for a fee of BWP 3 (about 53 US cents), review the licensing registry to learn which companies have been awarded licenses, which kinds of licenses have been awarded and the date the license was awarded.

In keeping with its pragmatic approach, BTA believes that market players cannot expect BTA to announce that it will undertake responsibilities it cannot fulfill. Rather than make a mockery of the process, BTA prefers to limit its activities to those it can perform well. Otherwise, it risks being viewed as incompetent and irrelevant.

8 Transparency

Transparency is a means of ensuring fairness in the regulatory process. The principle of transparency translates into the practice of making regulatory decisions in an open, objective manner that allows regulators to explain the reasoning behind their decisions and to be held accountable for their actions. Transparency not only helps the public and the regulated industry, it can help the regulators as well. Transparency allows regulators to gain

information and consult all stakeholders, thus building some political consensus for their decisions. It also allows regulators to justify their actions by citing the facts provided to them and by making cogent arguments that those actions will serve the public interest. Transparency may inoculate regulators from charges that they have rendered arbitrary decisions, behind closed doors, for reasons of personal gain or to benefit a certain company.

8.1 The Evolution of Transparency in Botswana

Since its creation in 1996, the level of transparency BTA has provided has been directly related to the level of staffing of the regulatory authority. Until very recently, BTA was forced to focus its efforts on the priorities of the nation – licensing operators to promote the provision of telecommunications services and the interests of consumers. Transparency is clearly growing as BTA adds additional staff responsible for implementing more transparent procedures and decision-making. It has been only very recently that BTA had sufficient staff to conduct public hearings, draft press releases, or publish other announcements.

There is also a growing appreciation of the value of transparent processes, particularly in the case of public consultation. As one board member noted, Botswana is too small not to be transparent. Everyone interacts with one another and learns each other's business. And BTA has concluded that it would prefer the public to learn about its business directly from BTA rather than from outside sources. Moreover, transparency is helping to foster a good working relationship between the operators and BTA.

Nevertheless, there are no rules that govern due process in decision-making, including lobbying, public consultation, *ex parte* contacts or the publishing of decisions. While BTA is making great strides to provide opportunities for interested parties to provide their views on pending matters, decision-making meetings are not open to the public or the licensees.

Some operators expressed interest in having the opportunity to comment on license awards, a decision that BTA would have to weigh in light of delays this may cause. Still, BTA was lauded for the transparency in which it conducted the GSM license award – even by BTC, which did

not succeed in its tender. BTA also received praise for holding a press conference to announce the GSM license awards. Nevertheless, future licensing tenders could be opened even more, for example by opening the tender clarification and tender opening meetings to the public, as well as opening the Board meeting at which the license awards are decided.

8.2 Access

One way to analyze transparency is to examine the degree to which individuals within companies, including operators, industry groups, or the public can access the staff of a regulatory agency to present their views and requests.

All members of the private sector gave BTA high marks for access. One indicated that BTA has an “open door” policy with regard to the private sector, a sentiment that was echoed by other operators. Private sector members feel they can call any BTA staff member, and have found them very responsive to learning about new technology. The market players have also been invited by BTA to come in for discussions on various issues. One ISP noted that BTA staff often keeps in touch by email. As a practical matter, because Botswana is such a small place, some members of the private sector have worked with BTA staff members in the past, either in the government or at BTC, and therefore know each other. Competitors are allowed to seek private appointments with BTA officials without notifying the other market players, a practice that may have to be revisited as or when more market players enter the market.

As mentioned previously, whenever market players are invited to BTA’s offices, they meet in special meeting rooms, antechambers to the working offices of BTA officials. BTA maintains strict control on who is given access to working offices because they contain confidential files. In this way BTA’s goal of maintaining transparency does not result in breaches of confidentiality.

8.3 Public Hearings and Comments

Members of the private sector all registered appreciation for the opportunity to comment on the pending national frequency plan and the consultative document on pricing principles.

Still, some licensees have complained that BTA has not yet held a public hearing or allowed public comment on its licensing decisions. In addition, some operators criticized BTA for its failure to provide advance notice of new license awards to existing operators. Many operators complained that they learned of the ISP and international data gateway licenses only when they read about them in the newspaper. BTA also postponed its first scheduled public hearing on the pricing consultative document pending further interest by civil society, a move criticized by the incumbent. While the incumbent notes that its business is being adversely affected by the delay, BTA has explained that the timing of the approval of BTC’s new tariffs rests in the incumbent’s own hands (see Section 6.1).

While licensing awards must be published, there is no requirement that the Authority publish rulings in the official gazette such as BTA’s first interconnection decision. Nevertheless, BTA decided to publish the leased capacity rulings in major Botswana newspapers in an effort to inform the public about the dispute. BTA won plaudits from the operators for having published its full leased line decision, including its justifications. This practice enables all market players – not just those party to the immediate dispute – to be aware of BTA’s decision, the reasons for its decision and to monitor compliance with the decision. The publication of regulatory decisions assists all market players to know if their rights are being respected.

For two years, BTA had only one lawyer other than the Executive Chairman with the skills needed to draft regulatory rulings and offer advice on their publication. Now that BTA has hired additional attorneys it is enabled to make its decisions more publicly known. Likewise, it now has sufficient staff to conduct a public consultation on pricing and the national frequency plan. Before it recruited more staff, BTA was reluctant to commit to greater openness out of fear that its credibility would be compromised if it failed to meet such a commitment.

BTA has begun issuing a growing number of press releases as it increases its staff.

Many market players are looking forward to the forthcoming BTA website as a means of improving transparency. BTA will use the website to announce license opportunities and

criteria. In the meanwhile the Authority can publish this information in newspapers of national distribution.

Currently, complaint letters from competitors are not made public, although no rules restrict BTA from so doing. BTA may wish to consider the publication of complaint letters, redacting any portions that contain sensitive business information.

BTA has fairly broad powers to require competitors to provide information under section 22 of the Act. For example, BTA has required BTC and its ISP subsidiary Botsnet to submit accounting records so that BTA can verify that the two entities maintain separate accounts as required by law. Competitors are entitled to indicate that certain information they provide to the Authority is confidential. When BTA receives a request to treat information confidentially, it makes a determination on the issue. So far, BTA has not disclosed market information other than that related to customer base, tariffs and market plans.

9 Relationship between BTA and MWTC

Although BTA jealously guards its structural and functional independence, the BTA Executive Chairman and the Minister of Works, Transport and Communication maintain cordial relations and consult with each other regularly. They work together on policy development and other issues. The BTA Chief Executive frequently requests appointments with the Minister to apprise the Minister regarding the Authority's activities and to discuss developments in the ICT sector. For example, at the time of this case study, the two officials were meeting to discuss the way forward for a universal service program and the need to develop a comprehensive ICT policy for Botswana. The Minister asked BTA to prepare a paper on ICT policy. This paper could be used as the basis for recommending a policy position to the government.

Despite having a large staff, the Minister has no team of experts that can provide advice on telecommunications or ICT policy. He therefore relies on BTA's expertise on domestic, regional and international issues affecting telecommunications and ICT. He looks to BTA to

provide an advisory role in this area. The Minister has also requested that BTA represent the country and the Ministry in international forums where ICT issues are discussed. BTA, for example, represents Botswana in ITU and Commonwealth Telecommunications Organization (CTO) Council meetings. The BTA Executive Chairman informs the Minister after he attends conferences and reports on Botswana's liberalization efforts from time to time to apprise the government of the pace of the implementation process.

10 Role of the Ministry

MWTC is responsible for telecommunication policy decisions. Again, both the Telecommunications Policy of 1995 and the Telecommunications Act of 1996 originated in the office of the MWTC. Today, in addition to initiating an ICT policy review in close collaboration with BTA, MWTC is taking responsibility for defining and designing a universal service policy for the nation. In the meanwhile, BTA is also in the midst of developing a national universal service program that would utilize some of its surplus funds (see Section 10.1)

The Ministry of Works, Transport and Communications (MWTC) is a large ministry, employing about 9,800 people excluding the five parastatals for which it serves as an administrator.¹⁹ It is responsible for transportation, (including the building and maintaining of roads, civil aviation and the rail system), public works, meteorology and telecommunications. The MWTC was created at the time of independence under the nation's Constitution. The Minister reports directly to the President.

10.1 Universal Service

Currently, the Ministry plays a large role in the implementation of the nation's universal service initiative, which is based on annual subsidies paid to BTC. In the early 1990s, BTC was required to ensure that every village of 250-500 people would have at least between three and seven lines. These were to include one public payphone, one line to the village chief

¹⁹ The five parastatals reporting to MWTC are BTC, BTA, Air Botswana, Botswana Railways and Botswana Post.

and his administration, one to the school, in addition to lines to the clinic and the secondary school if they existed. The government agreed with BTC's assertion that villages of this size are not commercially viable and has therefore paid subsidies to BTC to provide infrastructure to these small rural enclaves. BTC bears responsibility for maintaining the infrastructure once it is installed.

BTC submits a list of villages and the rate of return it predicts. MWTC prepares a project memorandum to the Ministry of Finance, and the Ministry of Finance decides which projects to fund. In effect, BTC profits are pumped back into providing telecommunications services for the people of Botswana. Because Botswana has mining operations that provide revenue for the government, Botswana has not treated BTC as a "cash cow."

The BTA board has agreed that BTA should establish a universal service fund to provide services to consumers that cannot otherwise afford them. BTA has commissioned private consultants (PriceWatershouseCoopers Botswana) to provide advice on how to design an efficient universal service program. The Minister of Works, Transport and Communications also concurs that BTA should fund a universal service program to be paid from BTA's budget surplus. In the meanwhile, the Minister believes that mobile operators are helping to provide services in a growing number of communities. Both GSM operators have exceeded the coverage requirements included in their license obligations.

10.2 Private Sector Consultations

MWTC also provides a venue for consultations with the private sector. The MWTC convenes a standing consultative forum between the Ministry and all players in the telecommunications sector in Botswana. The President also chairs a high-level consultation council, comprised of all government ministers, that meets with the private sector twice a year to discuss issues of concern to all market sectors. Through the Minister's High Level Consultative Forum, members of the private sector can bring their concerns to the attention of the MWTC. If they are unable to resolve outstanding issues, these issues may be brought before the President's High Level Consultation Council. When ISPs

were experiencing difficulty obtaining leased capacity from the incumbent, the matter was handled – at least in part – through the Minister's consultative forum. Ultimately, however, BTA issued a ruling ordering BTC to provide leased capacity to ISPs after the ISPs formally registered disputes with BTA on the matter. When BTC complained, the Minister informed BTC that BTA's ruling was consistent with the nation's liberalization policy. Later, BTC appealed the ruling to the High Court, but subsequently intimated that it would withdraw the appeal (see Section 6.2).

10.3 Appeals

BTA tariff decisions may be appealed directly to the MWTC, although in practice this has never occurred. All other BTA rulings may be appealed to the High Court.

10.4 BTC Privatization

The MWTC will also take a leading role when the government decides to launch the privatization of BTC. The Ministry of Finance and Development Planning issued a Privatization Policy for Botswana in 2000, calling for the privatization of a number of parastatals, including BTC and Air Botswana. Since then, all privatization efforts have stalled pending establishment of the Privatization Agency – although there have been a number of signals by top officials that the privatization will occur.

During the week of 9 July 2001, the president said that he favored the privatization of BTC. Earlier, the Minister of Finance announced that BTC would be targeted as a priority for privatization and the Minister of Works, Transport and Communication told Parliament that the BTC privatization would follow that of Air Botswana. However, in order for the nation's flagship airline to be privatized, the government would be required to amend the Air Botswana Act and establish a national Public Enterprise and Evaluation Privatization Agency (PEEPA). Following the field research for this report, the board and Chief Executive of the PEEPA were appointed, moving BTC closer to privatization. In the meanwhile, BTC noted that it supports privatization and has begun studying privatization options. At the time this report was being prepared, the incumbent indicated that it favored a strategic partnership.

BTA is preparing terms of reference to hire a consultant that would provide advice on introducing a second fixed line operator. Under the 1996 Telecommunications Act, BTA has full authority to grant a second fixed line license. Prior to issuing the license, however, BTA seeks to ensure that it fully grasps the ramifications of a second fixed line operator, in particular with respect to tariff rebalancing.

The Minister predicts that BTC's monopoly over fixed line voice services will continue for a while. He expressed concern that a second voice operator would not extend services to under-served or un-served rural areas, but would "cherry pick" the most lucrative customers. He believes that a "sweetener" such as an exclusivity-period can help to ensure that universal service goals are met, especially in a sparsely populated country like Botswana.

10.5 Ministry's Relationship with BTC

In the past, the Permanent Secretary of the Ministry of Works, Transport and Communication served as the Chairman of the Board of BTC. Today, while the Deputy Permanent Secretary to the MWTC is on BTC's Board, the BTC Chairman is not from MWTC.

11 Structural Independence of BTA

BTA is structurally and financially independent from the MWTC. It was created, and operates, separately from both the incumbent operator and the MWTC. Its offices are located in a recently constructed office building owned and financed entirely by BTA. Further, BTA drafts, approves and finances its own budget and makes all its own staffing decisions (see Section 4.3)

BTA also appears to operate independently from political influence. There is no requirement – nor any practice – that BTA report its draft decisions to the Minister before rendering them. While the Minister appoints BTA board members and can remove them with just cause – meaning BTA's top officials owe the Minister a degree of allegiance – there is no evidence that the Minister has tried to influence board members' decisions. For example, as part of the field research for this report, the Minister confirmed that he has no say in BTA's licensing decisions. Indeed, although the MWTC adminis-

ters BTC, the Minister did not try to influence BTA's decision to award the two GSM licenses to two new market entrants – even when the incumbent complained to him that it was being shut out of this vital new market segment. Nor was the decision overturned when the incumbent's consortium complained to the highest government officials, or after mean-spirited press reports appeared against the BTA Executive Chairman.

Likewise, when asked whether Botswana planned to license third generation mobile operators or authorize VoIP network operators, the Minister indicated that both decisions fall squarely on BTA. Both the Minister and members of the private sector confirmed BTA's own assertion that it makes its own rulings and decisions. Moreover, while operators have the right under the 1996 Telecommunications Act to appeal BTA tariff decisions to the Ministry, they have never done so. The incumbent has informally discussed BTA tariff decisions with the Ministry, but then opted not to initiate any formal action.

12 Future Institutional Structure Plans

The Privatization Policy calls for the creation of a national competition law and the creation of an "umbrella" or multi-sector regulatory authority to oversee all privatized monopolies. This would appear to call into question the long-term viability of BTA. As indicated above, however, the entire privatization process has stalled. Botswana also has no competition law – although the Ministry of Trade, Industry, Wildlife and Tourism is in the process of drafting one – and has made no move to implement the recommendation to create a multi-sector regulatory authority.

The Minister of Works, Transport and Communication favors a multi sector regulatory body that would regulate all forms of transportation, which he defines as including air, rail, roads, telecommunications and postal services. The BTA Executive Chairman vigorously opposes including BTA in any umbrella regulatory authority and has indicated that he would be ready to argue against such a move. He believes BTA has been successful and does not wish to see its success diluted other than adding postal services, which he views as a communication-

related service. The BTA Executive Chairman believes that specific sectors that are similarly situated should be subject to regulation by an authority with expertise in its sector and that multi-sector regulatory bodies are inefficient.

Both the Minister and the BTA Executive Chairman further believe that the functions of the nascent National Broadcasting Board and BTA should be combined and that Botswana will one day follow the international trend toward creating “converged” regulatory authorities responsible for telecommunications, information technology and broadcasting.

In addition, two Ministries have overlapping authority for information and communication technology (ICT). The MWTC is responsible for telecommunications. The Government Computer Bureau (responsible for all government IT computer maintenance such as data collected for the government payroll) and the Botswana Technology Center (responsible for research) report to the Ministry of Finance. Interestingly, MWTC Minister David Magang brought these two organs into the Ministry of Finance when he worked in that ministry. He is now developing a proposal to bring all ICT responsibilities under the MWTC.

Some parastatals have called for the creation of an ICT committee that would include the Botswana Technology Center, the Government Computer Bureau and BTA. In addition, the Southern Africa Development Community (SADC), an organization of 14 Southern African nations to which Botswana belongs is adding to the growing pressure for Botswana to adopt a comprehensive ICT policy. The SADC communications ministers approved a “Policy Guideline” on ICTs in November 2000. Both the MWTC and BTA are working on developing a national ICT policy framework.

13 Proposed Changes to the Telecommunications Act and Regulations

BTA is in the process of reviewing the Telecommunication Act and the Regulations in line with its experiences to date and regional trends. BTA has proposed several major changes, some of which are mentioned above.

In addition, BTA has proposed that the Telecommunications Act specify 1) which operators have an obligation to interconnect and 2) BTA’s power to decide who has an obligation to interconnect. Currently, BTA makes such determinations under its broad powers to encourage competition. If the Act were amended to clarify who has an obligation to interconnect, interconnection would not be a bottleneck for licensing. The existing legislative scheme requires potential operators to seek interconnection consent from another operator before it is licensed. Once it receives consent, the potential new market entrant can apply for a license. This would be unnecessary if the interconnection obligation were clearly spelled out.

Likewise, the Act authorizes BTA to regulate tariffs for local, national and mobile services. It does not specify tariff regulation for leased lines. BTA seeks to clarify this issue so there will be no doubt that BTA is authorized to rule on the terms and conditions for leased lines, which are vital to ISPs. While BTA has a broad power to promote competition, it seeks a clear power to set tariffs for all services.

As explained above, there are no universal service obligations in the Telecommunications Act. BTA currently promotes universal service and access through licensing conditions, requiring operators to serve underserved areas and offer community services. BTA seeks to amend the Act to identify universal service as a specific responsibility for BTA.

14 Best Practices and Challenges

Botswana’s experience offers a series of best practices that may serve as models to other countries as well as challenges it may wish to address in the future. These are discussed below.

14.1 Practices

National

- The public consultation that preceded the nation’s sector reform program;
- The sequence of sector reform, first drafting a Telecommunications Policy, deriving the Telecommunications Act directly from the Policy, creating a regulatory authority and then licensing competitive operators;

- Authorizing BTA to have full licensing authority, and not moving to interfere in its licensing decisions; and
- Developing a universal service/access programme.

BTA

- Commitment to strong legal processes in implementing its mandate;
- Full authority to decide which services should be licensed, how many licenses should be issued and which operators will be awarded a license;
- Full financial independence from the government, ensuring that its regulatory decisions are not influenced by funding concerns;
- An organizational structure designed to address market conditions;
- Full authority to recruit staff and to set their compensation packages;
- Recruitment of staff as needs evolved;
- An unwavering support to staff training;
- The charismatic leadership of the Executive Chairman that has enabled BTA to act in a bold, confident and effective manner;
- Establishing clear priorities and implementing those priorities;
- An operational philosophy based on committing to perform only those tasks that the Authority is confident it has the skills and resources to carry out; and
- The flexibility to add additional responsibilities as it builds capacity.

14.2 Challenges

National

- Developing a comprehensive ICT policy and regulatory framework;
- Reaching a decision on the future of BTA, including whether it will assume full responsibility for broadcasting or whether it will be subsumed under a multi-sector regulatory body;
- Implementing the privatization of BTC; and

- Improving Internet diffusion and developing local content.

BTA

- Improving the level of transparency commensurate with staff resources, including:
 - Establishing a code that governs all aspects of decision-making, including lobbying, public consultation, *ex parte* contacts and the publishing of decisions;
 - Conducting public hearings;
 - Opening decision-making meetings to the public;
 - Improving public consultations, including to accept comments on licensing awards and fostering input from consumers and other members of civil society; and
 - Launching a website aimed at improving transparency.
- Evaluating whether the regulatory authority should seek to protect consumers from potential quality of service deficiencies with VoIP services, or allow consumers to make their own choices;
- Developing a universal service programme designed for a competitive market;
- Completing the tariff rebalancing process;
- Establishing QoS guidelines, enforcement procedures and monitoring;
- Devoting human and equipment resources to QoS monitoring;
- Completing the national frequency plan;
- Implementing the goal of promoting consumer rights and awareness;
- Convincing the government to make all the changes to Botswana's legal framework BTA has proposed that are identified in this paper; and
- Taking the lead to guide the industry into the future.

14.3 Conclusions

The Botswana experience has yielded a number of best practices. Some of the best practices, such as launching the sector reform process, BTA's lean organizational structure and initial decisions on the level of competition to be authorized in Botswana, may be particularly valuable to small countries with fairly limited resources and low levels of telecommunication penetration, the Botswana experience also offers a number of world models. Among these are that BTA has achieved a high level of independence as measured by the lack of influence from the government in implementing its mandate. Its virtually unfettered authority to license operators and self-financing operation may also develop as a world model. BTA further provides good models of strong legal processes in carrying out its regulatory mandate.

Botswana has crafted a regulatory environment suited to its own special set of circumstances and in keeping with its own priorities at the time it launched its sector reform program. Botswana's number one priority was to improve the level and quality of basic telecommunications service provided to its citizens. Its efforts in this regard have been an overwhelming success. More than 10% of the population now has access to fixed-line service, and 16% of the population subscribes to one of the mobile cellular operators' services. Botswana has accomplished this goal by an unwavering support for sector reform at the highest levels of government and by empowering an effective and independent regulatory body to establish a regulatory framework conducive to competition and innovation.

There have been many opportunities for Botswana to take a second look at its initial 1996 decision to engage in sector reform. But Botswana never looked back. The eyes of the nation are implacably trained on the future.

The future, of course, holds many challenges and hurdles. First and foremost is how to ensure Botswana's place in the ICT environment. A series of key decisions regarding Internet access, Voice over IP, and the future structure and continuity of BTA itself remain to be resolved. If Botswana can harness the same level of determination, skill and commitment it has exhibited in the first stages of sector reform, it

will meet these challenges head on, securing its place in the future.

15 TRASA

The Telecommunication Regulators' Association of Southern Africa (TRASA) is a group of national telecommunication regulatory authorities from the 14 Southern African nations of the Southern Africa Development Community (SADC).²⁰ The organization was inaugurated on 15 September 1997 when regulators from the region met in Dar-es-Salaam, Tanzania. Five nations formally agreed to create TRASA and endorsed its constitution. According to the constitution, TRASA was to become operational once six nations that had a telecommunications regulatory authority signed the constitution. This occurred on 22 April 1998 when Namibia signed the constitution. The founding members are Botswana, Mozambique, Namibia, South Africa, Tanzania and Zambia.

15.1 TRASA Creation

A series of concurrent factors led to the creation of TRASA. First and foremost was the political will on the part of the Southern Africa Development Community (SADC) Member States to create a regional trading area that would provide a more stable and attractive environment for potential investors in the region. SADC, formerly known as the Southern African Development Co-ordination Conference (SADCC), was created in 1980 at the initiative of Botswana's first president, Sir Seretse Khama, to combat the influence of the apartheid regime of South Africa. Perhaps that is why Botswana was a chairman of SADC from 1980 to 1996. SADC Member States realized that while each of their countries was small, and individually could not attract the necessary capital to develop the region, as a regional unit they could create a sufficiently large market to attract public and private investment. In addition to regional political will, several strong leaders helped to push for the creation of TRASA.

²⁰ Angola, Botswana, Democratic Republic of Congo, Lesotho, Malawi, Mauritius, Mozambique, Namibia, Seychelles, South Africa, Swaziland, Tanzania, Zambia and Zimbabwe. So far Democratic Republic of Congo, Seychelles and Swaziland have not yet formed national telecommunications Authorities.

Box 6: What is TRASA?

Vision: *To be a model regulatory association, through the design and implementation of harmonized regulations and policies, to achieve universal service and sustainable communications development in an investor friendly environment.*

Mission: In believing that telecommunications is a basic human right and in the desire to implement this belief, TRASA will act as a catalyst to regulators and policy makers in the region by providing sound, harmonized model regulations and model policies aimed at attractive and sustainable economic development of the telecommunications industry. TRASA will act as the consolidated voice for its members in development and promotion of the region.



Goals and objectives as stated in its constitution:

- To co-ordinate regulatory matters and to exchange ideas, views and experiences on all aspects of regulation of the telecommunications sector throughout the Southern African region;
- To promote the establishment and operation of efficient, adequate, and cost-effective telecommunications networks and services in the Southern African region which meet the diverse needs of customers while being economically sustainable;
- To facilitate a uniform level of understanding of regulatory matters; and
- To maximize the utilization of scarce resources in specialist areas of telecommunications.

Established:	1998
Legal basis:	TRASA Constitution
Members:	Separate regulators (11) and observer members (3) from the 14 SADC countries
Voting powers:	countries that have established a separate telecommunication regulator.
Governing body:	Annual General Meeting
Working bodies:	5 committees. Each committee is composed of a convenor and a co-convenor, representatives from two countries, and charged with developing guidelines.
Executive secretariat:	3 members (Chairperson, Vice-Chairperson and Treasurer) plus the host of the secretariat
Secretariat:	currently located in Botswana, employing 3 part-time staff members
Members' contribution:	7'500 USD annually (target: 10'000 USD in 2005)
Financing:	members contributions and international grants (ITU, USAID's RAPID programme)
Working methods:	1999-2001 Action plan, 2000-2005 Strategic Plan, and programmes

The Lusaka Declaration of 1 April 1980 is the founding legal instrument of SADCC.²¹ It placed top priority on transport and communications. The Lusaka declaration states that *Without the establishment of an adequate transport and communications system other areas of co-operation become impractical. We will therefore create the Southern African*

Transport and Communications Commission to co-ordinate the use of existing systems and the planning and financing of additional facilities.

The Southern Africa Transport and Communications Commission (SATCC) was established in July 1981. Since then, SADC has created a number of other commissions for the development of other market sectors, such as water and electricity. Each commission has established a Technical Unit (TU), comprised of technical experts recruited from the region. The SATCC-TU is, among other things, responsible for

²¹ The membership of SADC has grown over time, from nine countries at the time the Lusaka Declaration was signed by SADCC to 14 SADC Member States in 1998. As South Africa moved to majority rule, the roles of SADC, SATCC and the SATCC-TU have changed in response.

ensuring compliance with any transport and communications obligations agreed by SATCC.

In 1996, USAID (United States Agency for International Development) funded the Regional Telecommunication Restructuring Program (RTRP). Originally, the goal of the RTRP was to assist countries in the SADC region in the privatization of government-owned telecommunication operators. RTRP realized that its goal would be facilitated if countries promulgated telecommunication policy and legislation that included creation of a regulatory body. RTRP contracted Price Waterhouse (now Price WaterhouseCoopers), to manage the RTRP project under Mr Brian Goulden, an ex-British Telecom Officer.

Originally, members of the Southern African Telecommunications Administrations (SATA), an association of 11 government-owned public telecommunication operators, met to discuss regulatory issues. Price Waterhouse moved to extend the discussions to include countries such as Tanzania and Zambia that had already established a telecommunications regulator separate from the incumbent. SATCC-TU also worked to bring the regulatory bodies into the discussions to ensure that those who would be regulated – operators – were not directly involved in the creation of regulatory authorities. At the 16th SATA Conference in 1996, SATA members recommended that a separate forum be established for Southern African regulators. Formal separation of regulators from SATA became effective in 1997.

Also in 1996, SADC passed the SADC Protocol on Transport Communications and Meteorology. TRASA draws its mandate from that Protocol. The objective of the Protocol is to develop national telecommunications networks for the provision of reliable, effective and affordable telecommunications, and to create regional harmonization and connectivity to support social and economic development. The Protocol gave impetus to the idea of promulgating a regional model telecommunications law and policy. In addition, it lent support to the notion of regional institutions, such as a regional regulatory association.

At the same time, a few strong regulatory leaders from the region, including Mr Lekaukau of the Botswana Telecommunication Authority (BTA), pushed to create a regional association

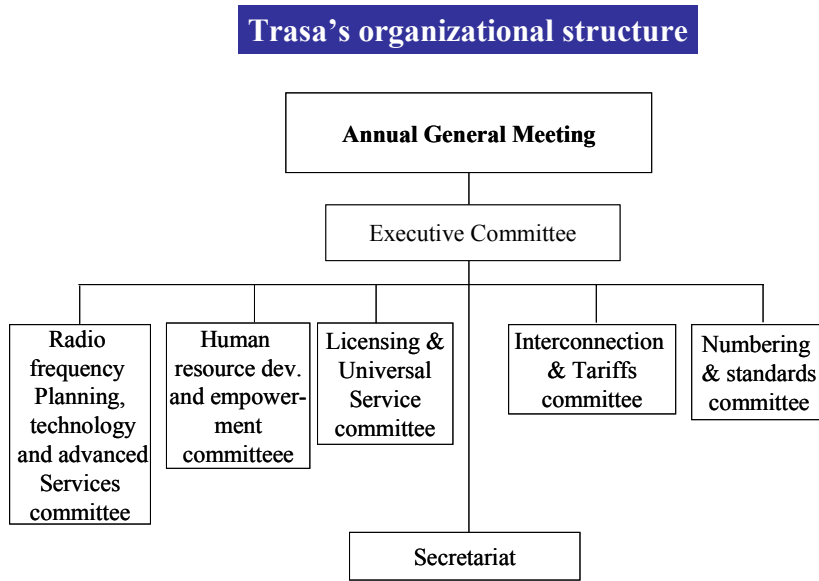
of regulatory authorities. Eventually the SADC Members agreed to create such an association separate from SATA. They used the constitution from the North American association, NARUC (National Association of Regulatory Utility Commissioners), as the basis for a constitution for an association of regulatory bodies from Southern Africa. They also agreed that the name of the organization would be Telecommunication Regulators' Association of Southern Africa (TRASA). TRASA was officially inaugurated in September 1997.

In July 1997, during a SATCC ministerial symposium, seven countries requested that RTRP assist them in developing model legislation and policy. RTRP, through Price Waterhouse, hired the law firm of Latham & Watkins in Washington, D.C. to prepare draft legislation and policy. After TRASA was created in September 1997, SATCC Members continued work on the model legislation and policy in a series of “think tank” meetings and workshops chaired by Mr Lekaukau. SATCC Members used the drafts prepared by Latham & Watkins, continuing to adapt and revise them. ITU, which attended the think tank meetings and workshops, also provided input that helped shape the model law and policy. A committee of SADC Telecommunications Ministers approved the SADC Telecommunication Policies and SADC Model Telecommunication Bill in June 1998.

The aim of the model legislation and policies was to act as a catalyst for regional harmonization of the telecommunication regulatory framework, furthering SADC's goal of creating a regional market that provides a stable and attractive environment for potential investors. SADC Member States founded TRASA as an offspring and facilitator of this process. SADC now seeks to become a harmonized trade region like the European Union, devoid of trade barriers.

TRASA continues to work to harmonize telecommunications policies and best practices in the region. It channels and coordinates recommendations to the policy-making structures of SADC, especially the SATCC. TRASA organizes workshops and meetings where best practices are exchanged informally. TRASA also spearheads the development of model guidelines and regulations. Through common training programmes, TRASA facilitates capacity

Figure 7 – Trasa’s organizational structure



building for its members. Some of its accomplishments are included in Section 15.3.

15.2 TRASA Structure, Funding and Support

According to the TRASA constitution, the Annual General Meeting (AGM) is the organization’s supreme body. The constitution was amended in September 2001 to provide for a four-member Executive Committee composed of a Chairperson, two Vice Chairpersons and the host of the TRASA Secretariat as ex officio member and treasurer. The first three members are to be elected from different SADC Member States for a term of one year and up to a maximum of two consecutive terms. The term limit does not apply to the host of the TRASA Secretariat. The constitution also calls for the creation of other committees to deal with specific matters of concern to the association.

TRASA currently has five committees covering the issues of licensing and universal service; interconnection and tariffs (including competition); numbering and standards; human resource development and empowerment; and radio frequency planning, technology and advanced services. Each of these five committees is charged with developing regulatory guidelines to be approved by all TRASA members and is headed by countries as convenors and co-convenors.

Traditionally, the country that hosts the AGM becomes the Chairperson for the subsequent term of office. The Chairperson is endorsed by the general meeting. Thus Zambia, which hosted the AGM in September 2001, was endorsed as the Chairperson for the next year with Lesotho and Tanzania as Vice Chairpersons and Botswana (host of the Secretariat) as Treasurer.

According to the TRASA Constitution, new regulatory authorities from the SADC region can join the association upon approval of their application at a TRASA AGM. Government ministries that have not yet established autonomous regulators are observer members, however, they enjoy all rights and obligations of other members but have no voting rights.

SATCC-TU served as the TRASA secretariat for nearly four years. RTRP fully funded TRASA from 1996 through November 1998. After this time, TRASA members began co-funding TRASA’s activities along with RTRP. Starting in 1998, each TRASA member contributed USD 5,000 per year. In 2001, membership fees rose to USD 7,500. This is to increase to USD 2,500 in 2002 and to reach USD 15,000 by the year 2005.

ITU provided funding for the TRASA Programme Manager – the head of the Secretariat – from October 1999 through September 2000. ITU also administered fellowships for TRASA workshops. In addition to participating

in TRASA meetings, ITU includes TRASA in many of its activities in the Africa region.

TRASA also continues to work closely with the USAID funded RAPID (Regional Activity to Promote Integration Through Dialogue and Policy Implementation) program, the successor to the RTRP. USAID provided funding for the TRASA secretariat from October 2000 through March 2001. RAPID has committed to help TRASA prepare a series of regulatory guidelines. In addition, TRASA continues to consult with the operators through SATA. TRASA seeks SATA's comments on its draft regulatory guidelines and invites SATA to attend some of its workshops. TRASA has also received the support of the United States Federal Communications Commission (FCC). The FCC has participated in several major TRASA meetings and workshops and offers resource people to the regulatory association. The former chairman of the FCC, William Kennard, participated as a keynote speaker in the AGM in Gaborone in 1999 at which the TRASA Action Programme was agreed. TRASA also collaborates with the Commonwealth Telecommunications Organization (CTO), which is helping to fund some programmes through the U.K. Department for International Development (DFID) grant for the Digital Divide, the African Connection and the African Telecommunications Union (ATU).

In addition to exploring grant offers from other organizations, TRASA is trying to develop long-term revenue-producing activities or investment planning. The TRASA AGM has agreed to sell its guidelines to help finance its activities.

BTA began serving as the TRASA secretariat from Spring 2001, providing staff for one year to fill the posts of Programme Manager, assisted by a BTA Senior Market Analyst, and a Secretary/Administrative Assistant. These BTA staff members devote between 60 and 80% of their time to TRASA. BTA also keeps TRASA's financial records as the treasurer. USAID has agreed to pay for a Senior Economist/Policy Analyst to assist BTA staff for a period of 18 months. TRASA has appointed a Botswana national – after a competitive selection process – who is expected to start in November 2001.

15.3 TRASA Accomplishments

TRASA implements its objectives through action programmes and plans. In April 1999,

TRASA agreed to an Action Programme for the period 1999-2001. The Action Programme identifies strategies, specific actions and deadlines for priority areas. Among other items, the Action Programme calls for encouraging and supporting the formation and operation of autonomous regulatory institutions in the SADC region and the development of model regulatory policies or guidelines.

When TRASA was created, only nine of the 14 SADC Member States had established a regulatory body. Today 11 SADC Members have created a regulatory body²². TRASA is likewise working to ensure that all SADC Members align their national legislation and policy with the SADC Model Telecommunications Legislation and the SADC Model Telecommunications Policy. This has already been undertaken by a number of SADC Member States. TRASA has also succeeded in promulgating a series of model guidelines. The Action Programme calls for the creation of guidelines on a number of issues such as interconnection and tariffs, numbering and standards, licensing and universal service, human resource development and radio frequency planning, technology and advanced services.

The TRASA committees, with support from the TRASA secretariat, are responsible for preparing these guidelines. Each committee is made up of representatives from two countries, a convenor and co-convenor. For example, Botswana is the convenor and Swaziland the co-convenor for universal service and licensing.

Each committee undertakes to complete a study on its respective issue, usually hiring a consultant to produce the study. This is followed by a workshop at which the draft guidelines are discussed among the member countries and any necessary revisions by the consultant. After the TRASA AGM approves the guidelines they go to the SADC Ministers of Transport and Communications for approval after clearance by the SATCC Telecommunications Committee and SATCC Committee of Senior Officials. TRASA has completed guidelines on interconnection and tariffs. These guidelines were approved by the

²² All SADC Member States with the exception of Democratic Republic of Congo, Seychelles and Swaziland have established a regulatory authority.

SATCC Council of Ministers on 3 November 2000, becoming the SADC interconnection and tariff guidelines and regulations.

TRASA is now working on the universal service and licensing draft guidelines, which are expected to be finalized by December 2001 and to be approved at the TRASA AGM in due course. The SADC interconnection guidelines provide for mandatory interconnection, time limits for negotiations, cost-based pricing, unbundling of services, non-discriminatory terms, publication of terms, intervention of the regulator to arbitrate and approval of interconnection agreements.

The tariff guidelines seek to ensure a balance between the interests of operators and consumers. They include approval of end-user prices by regulators, transparency through itemized billing, non-discriminatory pricing, oversight over tariff rebalancing, rebates to consumers for poor service or interruption of service and a dispute resolution mechanism.

TRASA also initiated work that led to the creation of a SADC Regional Frequency Band Plan. The SADC Frequency band plan addresses the economical use of radio spectrum, economies of scale based on regional integration, availability of spectrum for new service and cross-border concerns.

TRASA, through ITU, initiated a study on the feasibility of television broadcasters and telecom operators sharing 806-862 MHz band to enable the spectrum to be used for wireless local loop and mobile services in the region. Digital technology now being deployed for television broadcasting is expected to be more spectrum-efficient than analogue technology, which may

release spectrum for telecommunication services. The recommendations of the report are still being reviewed by the committee dealing with it.

Additional work identified in the 1999-2001 Action Programme remains to be done. In September 2000, TRASA adopted a Strategic Business Plan for the period 2000-2005. The Strategic Business Plan includes an action plan and benchmarks for TRASA's continued development. In addition, actions not completed from the earlier Action Programme have been incorporated into the Strategic Business Plan. (See Annex A, Action Plan as per Strategic Business Plan 2000-2005).

15.4 Future and Global Activities

TRASA participates in the ITU Global Symposium for Regulators and in the ITU Forum on Telecommunication Regulation in Africa. The most recent African Forum in September 2001, which also included the Arab States, agreed to create the African Telecommunications Regulators' Network (ATRN), with participation from TRASA.

TRASA has been requested to provide its model to other regions aspiring to form a similar co-operation among regulators and briefed some regional personnel on the issue. Specifically, TRASA has participated in workshops leading to the formation of the West Africa Telecommunications Regulators Association (WATRA) by the Economic Community of West African States (ECOWAS) and a similar workshop by the Common Market for Eastern and Southern Africa (COMESA).

Annex A

Action Plan as per Strategic Business Plan 2000-2005

Strategy One

To encourage and support the timely formation of autonomous regulatory institutions in the remaining countries in the region

Actions	Sub Actions	Schedule	Key Performance Indicators	Responsibility
Facilitate sharing of information, experience and expertise among members, assisting in implementation and technical issues where necessary	<ul style="list-style-type: none"> – Create forum for discussion – Facilitate training – Establish network and database for sharing of expertise and experiences among members – Establish a database of information on members progress – Co-ordinate information dissemination to members 	Currently commenced but needs to be ongoing and needs to be strengthened	<ul style="list-style-type: none"> – Increased participation among members in each others implementations – Increased number of countries forming autonomous regulatory bodies and liberalising their telecommunications industries – Full membership of all fourteen countries to TRASA 	Executive Secretary
Assist governments in the role of the regulators and to lobby governments regarding the adoption and implementation of policies and regulation	<ul style="list-style-type: none"> – Co-ordinate information dissemination to members 	Ongoing	<ul style="list-style-type: none"> – Implementation of policies throughout all fourteen members 	

Strategy Two

To complete the development of model policies and regulations for implementing in the region

Actions	Sub Actions	Schedule	Key Performance Indicators	Responsibility
Facilitate development of harmonized standards and regulations	Through the committees already established TRASA will <ul style="list-style-type: none"> – Develop model policies – Facilitate proactive solutions to development and problems in the regional telecommunications industry 	Ongoing	Initial policy development to be completed within one year <ul style="list-style-type: none"> – Adoption of policies by all fourteen member states – Standardized industry 	Committees for the development of the policies. All members for applying peer pressure for the adoption and implementation of such policies and regulations

Strategy Three

To build the internal capacity of TRASA members through facilitating training, sharing of experience and expertise

Actions	Sub Actions	Schedule	Key Performance Indicators	Responsibility
Facilitate sharing of information, experience and expertise among members, assisting in implementation and technical issues where necessary	<ul style="list-style-type: none"> – Create forum for discussion – Facilitate training – Establish network and database for sharing of expertise and experiences among members – Establish a database of information on members progress – Co-ordinate information dissemination to members 	Currently commenced but needs to be ongoing and needs to be strengthened	<ul style="list-style-type: none"> – Increased participation among members in each others implementations – Increased number of countries forming autonomous regulatory bodies and liberalizing their telecommunications industries – Full membership of all fourteen countries to TRASA 	Executive Secretary

Strategy Four

To encourage increased investment in the telecommunications industry throughout the SADC region, through ensuring the correct implementation of model policies and regulations

Actions	Sub Actions	Schedule	Key Performance Indicators	Responsibility
Co-ordinate cross border regulatory issues concerning telecommunications	<ul style="list-style-type: none"> – Develop suitable and applicable model policies and regulations for adoption by members throughout the region – Co-ordinate the development of all standards – Co-ordinate the technical development of systems and infrastructure – Co-ordinate policies in this regard 	Ongoing	<ul style="list-style-type: none"> – Standard regulation and investment environment throughout the region 	TRASA executive to ensure implementation through peer pressure. Secretariat to co-ordinate the development
Implementation of the SADC protocol	<ul style="list-style-type: none"> – TRASA Secretariat and member to play monitoring role in ensuring achievement of the Protocol – TRASA Secretariat and members to play prominent roles in lobbying for the adoption and implementation of suitable regulations and policies 	Ongoing	<ul style="list-style-type: none"> – Model policies and regulations adopted – Harmonized industry throughout the region – Increased investment in the industry in the region – Improved standards of infrastructure and delivery in the region 	TRASA, its executive and members
Development of effective regulation for regional economic development	TRASA to ensure that correct policies and regulations are developed to encourage the growth and development of the sector through evaluation of the policies, their implementation and the effects they have on the growth of the industry	Ongoing	Increased investment in the telecommunications sector in the region	TRASA Secretariat and Executive
Monitoring of Quality of Services and Technical Standards among members and the region as whole	<p>TRASA to be proactively involved in monitoring the design and implementation of standards</p> <p>TRASA to be proactively involved with members in ensuring that standards of service and quality of delivery compete with international standards</p>	Ongoing	Improved standards of service and delivery throughout the region	TRASA members, Secretariat and Executive
Development of common technical standards to achieve greatest economies of scale for the industry	<ul style="list-style-type: none"> – Encourage investment and development through promotion of the region – Encourage investment through relevant policy and regulation development and correct implementation – Monitoring the effects of policies and regulation implemented – Monitor the levels of investment and development in the region and the effects these are having on telecom 	Ongoing	Increased investment in the telecommunications sector in the region	TRASA members, Secretariat and Executive

Strategy Five

To establish TRASA as a financially self sustaining organisation

Actions	Sub Actions	Schedule	Key Performance Indicators	Responsibility
Gain acceptance to an increased subscription by all members	Canvass members to ensure	To be achieved by end January 2001	Increased fees agreed to USD 7,500 for 2001 and increasing annually thereafter	TRASA Chairman
Form a task force / committee to investigate the use of material produced by TRASA to form regular publications for the industry	<ul style="list-style-type: none"> – Assess the demand for such information among organizations in the telecommunications sector – Design a magazine base for the publications – Obtain interest in advertising in the publication – Seek international contributions to the publications – Contract out the printing of the publications – Establish a distribution network and commence selling – Obtain donor support for the implementation of the plan 	Project to be investigated by end March 2001. If feasible to be implemented by June 2001	Increased revenues from both advertising and sale of publications	TRASA Secretariat to form committee and investigate the project
Seek Donor support for the next three years funding while the fund raising projects are underway	Approach donors with business plan and obtain their support for the initial funding	To be done by January 2001	Funding agreed and in place	TRASA Secretariat and Executive

Strategy Six

To co-ordinate positions of its members so that they may speak with one voice in regional and international for a and to co-ordinate and monitor the development and implementation of regulatory policies

Actions	Sub Actions	Schedule	Key Performance Indicators	Responsibility
To act as the main voice for members and to establish a common view and action plan for the region	<ul style="list-style-type: none"> – Ensure correct policies and regulations are developed to encourage the growth and development of the sector – Monitor the standards and implementation of these throughout the region – Monitor developments internationally that may be of benefit or applicable to the regions development and to harmonized standards and regulations 	Establish with immediate effect then ongoing	Coordinated approach to issues and development of the telecommunications sector in the region	TRASA Secretariat and Executive
Co-ordinate the activities of regulators in the region	<p>TRASA secretariat to act as information co-ordination to members</p> <p>TRASA to apply peer pressure to member to ensure all members conform to action plans and agree developments</p>	To be established within three months and thereafter ongoing	Increased peer pressure to achieve among all members	TRASA Secretariat and Executive

Annex B

List of persons interviewed

State representatives

Hon. D. N. Magang, M.P. Minister of Works, Transport and Communications

Mrs K. Skelemani, Then Deputy Permanent Secretary, Ministry of Works, Transport and Communications

Dr M. A. Mpotokwane, Chairman, National Broadcasting Board

Mr M. J. Moatshe, Deputy Permanent Secretary, Ministry of Labor and Home Affairs (formerly Deputy Permanent Secretary of MWTC)

Representatives from the industry

Mr B. Goulden, Director, Chemonics (formerly Chief of Party for USAID-RTR Project)

Mrs M. Masire-Mwamba, Group Manager, Botswana Telecommunications Corporation

Mr. O. E. Nkomo, Manager Regulatory Affairs, Botswana Telecommunications Corporation

Mr H. Ramirez, Managing Director, Vista Cellular (Pty) Ltd.

M. M. L. Mokone, Communications and Public Relations Director, Mascom Wireless (Pty) Ltd.

Mr L. Mashungwa, Technical Director, 4Site

Mr T. Motsumi, General Manager, UUNet

Mr T. Motsoela, Managing Director, Infotech Consultants (PTY) Ltd. (formerly BTA Director of Engineering Services)

Mr J. M.M. Sekete, Director General, AME Enterprises (PTY) Ltd.

Representatives from Botswana Telecommunications Authority

Mr C.M. Lekaukau, Executive Chairman

Ms. M. T. Sekgororoane, Board Member

Ms. N. M. Molefi, Board Member

Mr M. O. Tamasiga, Director Market Development and Analysis

Mr T. B. Koontse, Director Communications and Consumer Affairs

Mrs M. Dube, Manager Finance

Mr T. S. Mosinyi, Director Engineering Services

Dr B. Molatlhegi, General Counsel

Mr B. Mmusi, Director Broadcasting Regulation

Representatives from TRASA

Mr T.M. Mogopa, Program Manager (a.i.)

Mr M. Mokgware, Senior Market Analyst, BTA