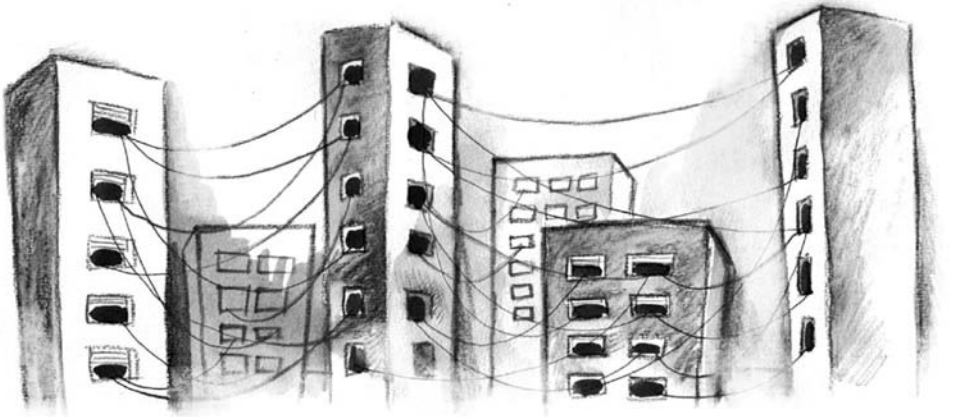


Universal Service and Universal Access

Mandla Msimang



Introduction

This chapter maps the development of universal service and universal access policy and legislation and evaluates the success of such policies and legislation in achieving universal service and universal access in South Africa. The chapter draws on the Telecommunications Act,¹ as well as the relevant regulations and licence conditions found in certain South African telecommunication service providers' licences. In addition, it draws on the White Paper on Telecommunications Policy, 1996.²

In evaluating the success of South Africa's universal service and universal access policies and legislation, this chapter first defines the global concepts of universal service and universal access and explains their relevance in a South African context. It then goes on to describe the legal, policy and institutional framework for universal service and universal access. Finally, it describes key policy approaches followed in South Africa and compares such approaches to those pursued in certain countries in Latin America, Asia and Africa. Countries selected for comparative analysis are middle income countries at similar levels of socio-economic development; they are all emerging market economies characterised by the fact that they have embarked on economic and telecommunications development and reform programmes, and have begun to liberalise their telecommunications markets and build accountability into their social, political and economic systems. Furthermore, they have been selected because they have adopted a macro-policy approach similar to that adopted in South Africa, although there are both similarities and differences in terms of implementation at a micro-level.

1. WHAT IS UNIVERSAL SERVICE AND UNIVERSAL ACCESS AND WHY REGULATE FOR IT?

Although often used interchangeably, the terms universal service and universal access have different meanings. The International Telecommunication Union (ITU) broadly defines universal service as referring to a telephone for every household,³ whereas universal access refers to a publicly available telephone (not necessarily in one's home), which might be provided through payphones, telecentres, multi-purpose community centres or other community-based centres.⁴

Understanding the difference between the terms is important, yet the objectives underlying both are similar — to make available, expand and maintain affordable telecommunication services to the public. In particular, the focus of such policies is to ensure the provision of services to rural, remote, and lower-income users who would not, in the absence of such policies, be served.⁵ Further, universal service and universal access are regulated in order to permit full access to modern technologies, to promote economic development, and to eliminate disparities between rural and urban areas⁶ and, in South Africa, to eliminate disparities between racial groups.

¹ Telecommunications Act, 103 of 1996.

² The White Paper on Telecommunications Policy, GN 291/1996, GG 16995 dated 13 March 1996.

³ H Intven 'Module 6: Universal Service' in Intven H and McCarthy Tétrault (eds) *Telecommunications Regulation Handbook* (McCarthy Tétrault LLP, World Bank, 2000) 6-1.

⁴ Intven (note 3 above) 6-1.

⁵ Intven (note 3 above) 6-1.

⁶ Intven (note 3 above) 6-3.

2. THE UNIVERSAL SERVICE AND UNIVERSAL ACCESS LANDSCAPE

As the development of universal service and universal access is ‘primarily a function of politics, economics, and social values,’⁷ it is not surprising that universal service, as a policy in South Africa, is relatively new. The South African experience is not born out of decades of telecommunications regulation in the public interest, as is the case in many other jurisdictions. Rather, current regulation emerges from an attempt to reverse the damage caused by decades of policies that promoted racial discrimination and denied certain individuals access to telecommunication services. The philosophy that informed apartheid and the ideology behind the promotion of universal service and universal access are mutually exclusive.⁸

Internationally, several methods of achieving universal service and universal access have been identified. These include, but are not limited to:

- universal service funds;
- exclusivity periods for incumbent services providers;
- mandatory service obligations imposed on licensees, such as community services obligations (CSOs); and
- regional or sub-regional licences.

In South Africa, similar methods have been used. The South African methods will be identified and analysed in this chapter.

2.1 ITU: ‘The Missing Link’

In December 1984, the Independent Commission for World-Wide Telecommunications Development released ‘The Missing Link’, also known as the Maitland Report.⁹ This Report highlighted the inequalities in telecommunications resources between developed and developing countries. It also established that there is a direct correlation between the availability of and access to telecommunications infrastructure and a country’s economic condition and growth. Thus, the ‘missing link’ is the lack of telecommunications infrastructure in developing countries. The effects of this ‘missing link’ are found to be an impediment to economic growth.

Extrapolating from Maitland’s ‘missing link’ theory, within South Africa the ‘missing link’ exists not only along national lines, but also along race and class lines. In 1994, the new government inherited the highest average teledensity in Africa, which in 1996 was 10,05 per 100 people.¹⁰ But, in addition to being low by middle-

⁷ S Harmet ‘Universal Service: Prosaic Motives and Great Ideals’ (1994) *Journal of Broadcasting and Electronic Media*, 38(4) 375-95.

⁸ M Langa ‘Regulating Universal Service: The South African Experience’ International Institute of Communications (IIC) Conference (Tampa, Florida, 2002). Available at Icasa.

⁹ The Plenipotentiary Conference of the ITU (Nairobi, 1982) established the Independent Commission for World-Wide Telecommunications Development, chaired by Sir Donald Maitland in May 1983 since the United Nations General Assembly had proclaimed 1983 as ‘World Communications Year’ to provide the opportunity for all countries to undertake a comprehensive review and analysis of their policies on communications development. The Independent Commission’s mandate was to identify the obstacles hindering communications infrastructure development and to recommend ways in which the expansion of telecommunications across the world could be stimulated. In January 1985, the Independent Commission submitted its report known as *The Missing Link* to the Secretary-General of the ITU.

¹⁰ A Gillwald ‘Experimenting with Institutional Arrangements for Communications Policy and Regulation: The Case of Telecommunications and Broadcasting in South Africa’ (2002) vol 2 no 1 *Southern African Journal of Information and Communication*. See <http://link.wits.ac.za/journal/journal2.html>.

income country standards, the teledensity was also very racially skewed. Eighty-nine percent of white households, 77 percent of Asian households, 43 percent of Coloured and 11 percent of Black households had a telephone.¹¹ Five years later, penetration is still skewed and teledensity is at 10,6 percent based on the 2001 South African Census ('the 2001 census'). The 2001 census was far more refined in its approach to discovering the levels of universal access and service, and requested information from respondents on not only whether or not people had phones, as did the previous national census in 1996, but whether they had a phone in their dwelling and whether the respondent had a cell phone in his or her household. It went further and requested information on universal access through enquiring whether the respondent had access to a phone through a neighbour, a public telephone, or another location nearby; or alternatively at another location not nearby. Finally, it asked whether the respondent had access to a telephone at all. An analysis of the responses led to the finding that 2,5 percent and 4,5 percent of the households surveyed had a telephone in their dwelling only and a cell phone respectively, 3,6 percent of the households had both a cell phone and a telephone in their dwelling. Thus, it can be estimated that universal service, measured by personal access to telephone (and cellular) services, was at approximately 10,6 percent in 2001.

An analysis based on race revealed that as of the 2001 Census, 7,57 percent of Black households, 12,11 percent of Coloured households, 22,1 percent of Asian households, and 31,3 percent of White households had access to a telephone only, a cell phone only or a telephone in their dwelling and a cell phone.¹² These figures cannot be compared directly to the results of the previous census due to a difference in the questions posed and therefore the approach and the information gathered. However, what remains relevant is the finding that the skewed racial distribution of telecommunications service and access still exists.

2.2 WTO: South Africa's International Commitments

South Africa is a party to the World Trade Organisation (WTO) Agreement including the General Agreement on Tariffs and Trade (Gatt) and the General Agreement on Trade in Services (Gats). The Fourth Protocol of the Gats, which came into effect in February 1998, specifies the terms of market access for basic telecommunication services.¹³ South Africa also made commitments contained in the Reference Paper, which forms part of South Africa's Schedule of Specific Commitments to adhere to certain basic regulatory principles. The Reference Paper addresses areas such as licensing, interconnection, anti-competitive behaviour and transparency, which are all critical to telecommunications reform and which in turn will facilitate the implementation of universal service and universal access policies.

The Reference Paper also deals specifically with universal service and makes provision for each country to define its own objectives for universal service:¹⁴

¹¹ Gillwald (note 10 above) 41.

¹² <http://www.statssa.gov.za/SpecialProjects/Census2001/Census2001.htm>.

¹³ The Fourth Protocol to the Gats contains a Reference Paper to which some 65 signatories have made commitments. South Africa, Schedule of Specific Commitments, Supplement 2 GATS/SC/78/Suppl.2, 11 April 1997. See also chapter 1 herein.

¹⁴ Reference Paper para 3.

Any Member has the right to define the kind of universal service obligation it wishes to maintain. Such obligations will not be regarded as anti-competitive per se, provided they are administered in a transparent, non-discriminatory and competitively neutral manner and are not more burdensome than necessary for the kind of universal service defined by the Member.

Thus, in determining its universal service and universal access policies and law in regard thereto, South Africa must have due regard to its international obligations as set out in the Reference Paper. In particular, there is a responsibility to achieve universal service and universal access in a transparent manner and without hampering competition or discriminating against any class of operators. Furthermore, such obligations should not be unduly burdensome.

2.3 From the White Paper to the Telecommunications Act

In line with policies that have been pursued by other developing countries undergoing telecommunications regulatory and sector reform, such as Chile, Peru, Malaysia and Uganda, the White Paper states that:

The state recognises the central importance of access to telecommunications to the achievement of its economic and social goals. Affordable communications for all, citizens and businesses alike, throughout South Africa, is at the core of its vision and is the goal of its policy. The challenge is to articulate a vision that balances the provision of basic universal service to disadvantaged rural and urban communities with the delivery of high-level services capable of meeting the needs of a growing South African economy. The vision must therefore reconcile these two seeming opposites within an integrating framework, which also allows for a dynamic definition of universal service and facilitates the co-ordination of all available infrastructure behind its goal.¹⁵

The Telecommunications Act enshrines the principles of universal service and universal access and has as one of its objectives the promotion of the universal and affordable provision of telecommunication services. Further objectives of the Telecommunications Act supporting universal service and universal access are:

- promoting the provision of a wide range of telecommunication services in the interests of economic growth and development;¹⁶
- making progress towards the universal provision of telecommunication services;¹⁷
- promoting the development of telecommunication services that are responsive to the needs of users and consumers;¹⁸
- ensuring that the needs of the local communities and areas are duly taken into account;¹⁹ and
- ensuring that the needs of disabled persons are taken into account in the

¹⁵ White Paper (note 2 above) 1.1, 1.2, 1.3.

¹⁶ s 2(b) of the Telecommunications Act.

¹⁷ s 2(c) of the Telecommunications Act.

¹⁸ s 2(f) of the Telecommunications Act.

¹⁹ s 2(g) of the Telecommunications Act.

²⁰ s 2(h) of the Telecommunications Act.

provision of telecommunication services.²⁰

The Telecommunications Act established two bodies: the sector-specific regulatory authority, the South African Telecommunications Regulatory Authority (Satra),²¹ which has been superseded by the Independent Communications Authority of South Africa (Icasa),²² and the specialised Universal Service Agency (USA),²³ to ensure that institutional arrangements were in place to address universal service and universal access.

3. ROLE AND RELEVANCE OF THE USA

3.1 Establishment and Functions

The USA was established in terms of section 58 of the Telecommunications Act. Its operations are financed from money appropriated by Parliament.²⁴ It is responsible for, inter alia:

- striving to promote the goal of universal service;²⁵
- encouraging, facilitating and offering guidance in respect of schemes to provide universal access or service, or telecommunication services as part of the reconstruction and development (RDP) projects and programmes;²⁶
- fostering the adoption and use of new methods of attaining universal access and service;²⁷ and
- stimulating public awareness of the benefits of telecommunication services.²⁸

In terms of section 59(2)(a) of the Telecommunications Act, the USA has a responsibility periodically to make recommendations to the Minister of Communications on what will constitute universal service and what will be considered universal access. The Telecommunications Act recognises that due, for example, to changing socio-economic and technological factors, the definitions of 'universal service' and 'universal access' will evolve and will need to be amended from time to time. Section 59(2)(b) provides for amendment or substitution by the Minister of the determination that he or she makes on the definitions based on the recommendations of the USA.

In addition to the specific functions of developing recommendations on what will constitute universal access and universal service, the USA has the power to conduct other investigations with respect to universal access and universal service as it considers necessary.²⁹ As such, it is a research body and is responsible for determining to what extent South Africa's universal service and universal access targets have been met.³⁰ The USA also plays an advisory role to Icasa and may, and must when requested by Icasa to do so, advise it on any matter with respect to universal service,

²¹ s 5 of the Telecommunications Act.

²² s 3(1) of the Independent Communications Authority of South Africa Act, 13 of 2000 (Icasa Act), GN 462/2002 GG 21154 dated 5 May 2002.

²³ s 58(1) of the Telecommunications Act.

²⁴ s 61(1) of the Telecommunications Act.

²⁵ s 59(1)(a) of the Telecommunications Act.

²⁶ s 59(1)(b) of the Telecommunications Act.

²⁷ s 59(1)(c) of the Telecommunications Act.

²⁸ s 59(1)(d) of the Telecommunications Act.

²⁹ s 59(3)(a) of the Telecommunications Act.

³⁰ s 59(3)(g) of the Telecommunications Act.

³¹ s 59(3)(e) and (f) of the Telecommunications Act.

universal access or the community service obligations of telecommunications service providers.³¹

3.2 Key Policy Projects of the USA

3.2.1 *Developing definitions of universal service and universal access*

In order to be effective, universal service and universal access policies must be sufficiently flexible to adapt to the changing needs of the country in which they are to be applied. A generic definition of universal service or universal access set by an intergovernmental organisation such as the ITU or WTO would not sufficiently cover all of the aspects unique to a particular country as there is a direct correlation between a country's local social, economic and political conditions and its universal service and universal access definitions and policies, including the specific targets for service levels to be achieved and dates by which such targets should be met.

In developing a universal service policy, South Africa had to define the important concepts of 'universal service' and 'universal access' from a local perspective. This task was given to the USA in terms of section 59(2) of the Telecommunications Act, which gives the USA responsibility for promoting universal service and universal access by making recommendations to the Minister to determine what should constitute universal service and universal access.³²

In line with the requirements of section 59(2)(a), in 1998 steps were taken by the USA, in collaboration with Satra, to define universal service and universal access, and the criteria to be used in South Africa to measure success in attaining these goals. A consultation paper was published to initiate public discussion of the definitions. However, to date no such definitions have been adopted.³³ The lack of definitions for universal service and universal access makes it difficult to implement targeted policies to address universal service and universal access gaps. These two definitions should, *inter alia*, articulate targets for the country, measured by a target number of people having phones in their homes in the case of universal service, and by the number of people with access to publicly available phones within a certain distance in the case of universal access.

3.2.2 *Definition of 'needy people'*

In terms of the Telecommunications Act, the Minister may define the categories of 'needy' persons to whom assistance, in the form of subsidies, should be given.³⁴ The USA began research that would influence the categories of 'needy' people and a discussion paper on the Definition of Universal Service and Universal Access in Telecommunications in South Africa was distributed on 22 October 1998. However, there has been little development in either the determination of the categories. In the absence of clarity on the categories of needy persons, it cannot be determined very easily to whom subsidies should be provided.

³² § 59(2)(a)(i) and (ii) of the Telecommunications Act.

³³ Discussion paper on 'Definition of Universal Service and Universal Access in Telecommunications in South Africa' GG vol 400 no 19397 dated 22 October 1998; available at <http://www.polity.org.za/html/govdocs/discuss/usa.html>.

³⁴ § 66(4)(a) of the Telecommunications Act.

3.2.3 Affordability

A key goal of universal access is to provide telephony at reasonable rates. It is therefore important for policy-makers and regulators to make determinations on what is in fact affordable in their respective jurisdictions. Defining ‘affordability’ is truly a challenge, the main difficulty being that two key variables — namely the cost of services and the income of subscribers — differ considerably from one region to another within one country.

Quantitative measures of the relative concept of affordability involve estimating the percentage of income that households might be forced to spend for service at various income levels and rate levels. Qualitative measures include what people consider ‘too expensive’ or ‘too much’ to pay for a telephone service.³⁵ In South Africa, although a study was commenced in 1998 to determine affordability,³⁶ the results have not been finalised. A benchmark for ‘affordability’ in South Africa has thus not been established. In terms of section 59(3)(e), it is part of the mandate of the USA to recommend same to the Minister, but such recommendation has, as at July 2004, not been made.

The White Paper recognised that:

The adequate attainment of universal access and service goals is largely dependent upon meeting the requirements of affordability. Indeed, the manner in which the cost of services is regulated or determined is fundamental to the implementation of Government policy. The key requirement is to create a balance between affordability and the needs of the operator to expand and upgrade its network.³⁷

In recognition of this, in addition to the USA being given the task of defining affordability, the Authority was given the task, on the one hand, of encouraging low tariffs and, on the other, of facilitating the rebalancing of Telkom’s tariffs to make Telkom more efficient.³⁸ Section 45 of the Telecommunications Act addresses the obligation of the Authority to prescribe the manner of determining fees and charges (Rate Regime) in areas where there is insufficient competition. The Authority issued Rate Regime regulations in 2001, which regulations are discussed in further detail in chapter 7.³⁹ Following Telkom’s challenge to the 2001 Rate Regime regulations,⁴⁰ Icasa and Telkom entered into an out-of-court settlement agreement which was made an order of court and included amongst its provisions the refunding of R325 million that had been overcharged to consumers by Telkom, the introduction of Internet packages and the introduction of a ‘Lifeline’ service that would allow subscribers who had defaulted on their payments for fees and charges, but who had paid their line rental charge, to continue to receive calls and be able to make emergency calls.⁴¹ In 2002 the Authority made new Rate Regime regulations⁴² which are currently in effect and continue to utilise a price cap methodology to control the level of increases by dominant public switched

³⁵ <http://www.benton.org/Library/Prospects/goals.html>.

³⁶ Note 33 above

³⁷ White Paper (note 2 above) 6.1.

³⁸ White Paper (note 2 above) 6.2, 6.3.

³⁹ Regulations on Fees and Charges in the PSTS Sector GN 1248/2001 GG 22870 dated 26 November 2001.

⁴⁰ Icasa instituted an application in the High Court (Transvaal Provincial Division) against Telkom and the Minister under case no 33507/2001 as amended on 19 March 2001. Telkom instituted an application in the High Court: Telkom SA Ltd v ICASA Chairperson, ICASA, Minister of Communications TPD, case no 07161/2002, unreported.

⁴¹ Settlement Agreement entered into between Chairperson, Icasa and Telkom clause 2.1.

⁴² Regulations on Fees and Charges in the PSTS Sector GN 1333/2002 GG 23986 dated 24 October 2002.

telecommunications services (PSTS) operators. Notwithstanding the 2002 Rate Regime regulations and their impact on the increase of retail PSTS prices, in the absence of the USA's recommendations on what constitutes affordability, such prices are still effected in a policy vacuum as far as the definition of affordability is concerned.

As at July 2004, the USA had not managed to produce any of the three major policy recommendations that it has been mandated to deliver. It has not delivered definitions of universal service and universal access, needy people, or affordability. These are, however, cornerstones of the development of an effective universal service and universal access policy as they frame the national targets and assist in defining the needs in the country.

4. ROLE AND RELEVANCE OF USF

Another function of the USA is the management of the Universal Service Fund (USF), which has been established in terms of section 67 of the Telecommunications Act.

The concept of a 'universal service fund' is not unique to South Africa. Universal service and universal access funds⁴³ have been developed in many jurisdictions as a means of financing the implementation of universal service and universal access projects, and in particular, the delivery of telecommunications services to uneconomic areas and persons. Universal service funds receive finance from various sources and provide targeted subsidies to encourage the provision of telecommunications services by operators to otherwise uneconomic areas and persons. This section looks at the South African USF and compares it to other universal service funds in certain Asian, Latin American and other African countries.

4.1 Administration of the USF

The USF was established in terms of section 65(1) of the Telecommunications Act. All money received is paid into the National Revenue Fund (NRF) established by section 185 of the final Constitution.⁴⁴ While section 65(3) indicates that subsidies paid from the USF under section 66 shall be financed from money appropriated by Parliament for that purpose, section 65(4) goes further to state that the USF is administered by the USA subject to the control and in accordance with the instructions of the Minister. In practice, monies collected by the Authority are placed in the NRF.⁴⁵ They are then apportioned from the NRF to the USF. The USA has access to the monies in the USF through an appropriation by Parliament for that purpose.⁴⁶ Section 66 of the Telecommunications Act states that the money in the USF shall be used exclusively for the payment of subsidies for the stated purposes.

The tool used to audit the spending of monies in the USF is set out in section

⁴³ Although terminology differs across jurisdictions, for the purposes of this discussion the term 'universal service fund' will be used to refer to both a universal service fund and a universal access fund.

⁴⁴ s 65(2) of the Telecommunications Act.

⁴⁵ s 65(2) of the Telecommunications Act.

⁴⁶ s 65(3) of the Telecommunications Act.

68, which enjoins the USA to keep audited records of the accounts of the USF. The USA is further required to provide the Minister and Parliament with annual reports that include information on progress made towards achieving the goal of universal service and universal access.⁴⁷

4.1.1 International comparison on administration of USFs

Countries adopt different approaches to the management of universal service funds. In some jurisdictions, such as Colombia, a government ministry administers the USF.⁴⁸ In others, for example Chile, India, Malaysia, Peru and Uganda, the regulatory authority is responsible for the administration of the USF.⁴⁹ In the case of Uganda, the regulator, the Uganda Communications Commission (UCC) set up a Rural Communications Development Fund (RCDF) Board to oversee the management of the fund. The RCDF Board, however, functions as a committee of the UCC and reports to it.⁵⁰ In a similar vein, in Malaysia, the monies in the fund are disbursed subject to the approval of a committee of the regulator, which includes at least one licensee; however, overall responsibility for the fund and its accounts lies with the regulator.⁵¹ South Africa is therefore unique among developing countries in its establishment of a specialised universal service agency to deal with the administration of USFs. It is similar, however, to Colombia in terms of the role the Minister plays in the disbursement of the funds. International best practice is to have funds administered by separate independent agencies or regulators to avoid government or political interests influencing funding allocations.⁵²

4.2 Contributions to the USF

In terms of section 67(1) of the Telecommunications Act, every holder of a licence granted or deemed to have been granted in terms of chapter V of the Telecommunications Act must pay a prescribed annual contribution to the USF. In 1997, pursuant to section 5(4)(a) of the Telecommunications Act, the Minister issued a policy direction applicable to contributions to the USF payable in terms of section 67 of the Telecommunications Act.⁵³ In terms of the policy direction, contributions by licensees to the USF were capped at a maximum level of R20 million per annum, with such amount to be adjusted annually for inflation. It was further stated that Telkom South Africa Limited (Telkom), the monopoly PSTS operator, would be responsible for contributing no more than half of the total amount of the USF (ie ZAR 10 million).

The regulations on contributions to the USF made by the Authority in 1999 in

⁴⁷ s 63 of the Telecommunications Amendment Act, 64 of 2001 (Telecommunications Amendment Act).

⁴⁸ Colombia's universal service fund is administered by the Ministry of Communications. Intelcon Research, November 2001; available at <http://www.inteleconresearch.com/pages/forum4-colombia.html>.

⁴⁹ Peru's universal service fund is administered by Organismo Supervisor de la Inversion Privada en Telecomunicaciones (Osiptel). In Chile the universal service fund is administered by the Subsecretaria de Telecomunicaciones de Chile (Subtel). In India, the Telecommunications Regulatory Agency of India (TRAI) is responsible for universal service fund administration. The Malaysian universal service fund is administered by the Malaysian Communications and Multimedia Commission (CMC) Source: CMC Commission Determination on Universal Service Provision, Determination no 2 of 2001. The Uganda Rural Communications Development Fund (RCDF) is administered by the Uganda Communications Commission, which is the telecommunications regulator. Source: Rural Communications Development Policy of Uganda (2001), 3.3. See <http://www.ucc.co.ug/rcdf/rcdfPolicy.pdf>.

⁵⁰ Rural Communications Development Policy of Uganda (2001), 3.4.1. See <http://www.ucc.co.ug/rcdf/rcdfPolicy.pdf>.

⁵¹ CMC Commission Determination on Universal Service Provision, Determination no 2 of 2001, clause 23.

⁵² Intelcon Research, November 2001. Universal Access Funds. See <http://www.inteleconresearch.com/pdf/UA Funds.pdf>.

⁵³ Ministerial Policy Direction no 3 on Contributions to Universal Service Fund GN 775/1997 GG 17984 dated 6 May 1997.

terms of section 67(2) of the Telecommunications Act were designed around the constraints contained in the policy direction. The regulations ensured that the amounts to be paid into the USF by all licensees other than Telkom did not exceed half of the USF or the R10 million, plus inflation, to be paid by Telkom.⁵⁴ In terms of the Authority's regulations PSTS, Mobile Cellular Telecommunications Services (MCTS) and certain other deemed licensees had to contribute 0,16 percent of their annual turnover derived from the provision of the telecommunication service that they were licensed to provide. Value-added network service (Vans) providers and private telecommunications network (PTN) operators were levied a fixed fee of ZAR 1 500 and ZAR 1 000 per annum respectively.⁵⁵

Given that the USF was capped in accordance with the Minister's policy direction, the regulations further made provision for refunds to licensees in the event that it was found that licensees had overpaid. This overpayment was made possible because the contributors' annual turnover was somewhat unpredictable and the percentage-based USF contribution could not be guaranteed to fall below the thresholds set by the Minister.⁵⁶

In 2001, section 67(2)(a) of the Telecommunications Act was amended.⁵⁷ The regulator maintained its powers to prescribe the basis and manner of contributions to the USF; however, the cap on the USF no longer limits such contributions. Instead, there is a limitation that contributions cannot exceed 0,5 percent of a licensee's annual turnover. After following a regulation-making process in terms of section 96, the Authority in 2003 made regulations, which repeal the 1999 regulations. In the 2003 regulations, the Authority set a levy of 0,2 percent of revenues, which is charged to all chapter V licensees.⁵⁸ Under-served Area Licensees (USALs) and PTN operators are required to pay a fixed amount of ZAR 1,00 (one rand) per annum.⁵⁹ This nominal amount can be seen to take into account the fact that USALs may be primary beneficiaries of the USF and that already, by their very nature, they contribute to the provision of universal service and universal access, and as such should not have to make payments into the fund; and, in addition, that PTNs do not run public networks and as such do not offer telecommunications services on a commercial or for-profit basis.

For various reasons, the Authority did not, in the 2003 regulations, propose that the full 0,5 percent that is allowable in terms of the Telecommunications Act be used. Amongst the reasons for this is the fact that an increase to 0,5 percent of annual turnover from the previous contribution would have resulted in a 960 percent increase in the total amount of money in the fund, from the existing capped R20 million. Furthermore, it would have been further difficult for the Authority to justify such a policy move, given that certain determinations, such as setting the definitions of affordability and universal service and universal access, setting the formula for disbursements from the USF and determining categories of needy persons, had not yet been made — yet these were critical to determining the total level of contributions required.

⁵⁴ Regulations relating to the contributions to the USF and the Apportionment thereof (1999 USF Regulations) GN 730/1999 GG 20162 dated 4 June 1999.

⁵⁵ 1999 USF Regulations (note 54 above) regulation 2(1)(a).

⁵⁶ 1999 USF Regulations (note 54 above), regulation 3(3) and 3(4).

⁵⁷ s 67(2)(a) was substituted by s 27 of the Telecommunications Amendment Act.

⁵⁸ Regulations in Respect of the Annual Contributions to the Universal Service Fund by Holders of Telecommunication Service Licences (2003 USF Regulations) GN 1241/2003 GG 25408 dated 29 August 2003 regulation 2(1).

⁵⁹ 2003 USF Regulations (note 58 above) regulation 2(2).

4.2.1 Comparison of international strategies for determining contributions to USFs

The sources of financing for universal service funds differ from country to country. Financing for universal service projects is obtained in some instances from national revenues from governments, and in others through levies placed on operator revenues and set fees. This is the case in South Africa through section 67.⁶⁰

Countries that have adopted a similar approach to that followed in South Africa, namely of sourcing the monies in the fund through levies imposed on operators based on their revenues, include Uganda, Peru, Nepal and Colombia.⁶¹ In comparison with the amounts levied in those jurisdictions, the South African operator contribution, as a percentage of revenues, at 0,2 percent of the operators' revenues is relatively low. In Colombia, for example, the PSTS and other long-distance operators pay five percent of their revenues to the Compartel Program,⁶² and revenues generated from licence fees are placed in the USF. There is a two percent levy for similar operators in Nepal, and a one percent levy in Uganda and Peru.⁶³ Further, the capping of the USF in South Africa has not been replicated in any other jurisdiction, nor has the limitation on the monopoly PSTS operator to provide only 50 percent of the total contributions to the USF.

The USF in Chile, Fondo de Desarrollo de Telecomunicaciones (Telecommunications Development Fund (FDT)), differs further from the USF and the other USFs mentioned earlier in its approach to sourcing finance. FDT was created in 1994 through an amendment to Chile's 1982 telecommunications law and is financed from the Chilean national government budget.⁶⁴

4.3 Application of USF money

In terms of section 66(2) of the Telecommunications Act, the Authority prescribed that the money in the USF is to be apportioned for the separate purposes of section 66(1)(a) and (b) to the value of 99 percent and one percent respectively.⁶⁵ Section 66(1)(a) of the Telecommunications Act deals with the provision of subsidies for assisting towards the cost of the provision to or the use by 'needy persons' of telecommunication services. Section 66(1)(b) deals with the provision of subsidies to Telkom or other chapter V licensees for financing the extension of their telecommunication services to areas and communities that are not adequately served by telecommunication services. Thus, the focus in South African regulations has been on the use of the USF almost wholly for the assistance of 'needy persons'.

In terms of section 66(2) of the Telecommunications Act, the Minister is now responsible for determining the apportionment of monies in the USF, although the Minister has to date not made such determination. In terms of the Telecommunications Act, other uses of the USF monies as stipulated in section 66 could include:

- supporting public schools with the procurement of Internet services and

⁶⁰ Intven (note 3 above) 6-1.

⁶¹ Intelcon Research (note 52 above).

⁶² Compartel Program is the name of the Colombian USF. See www.compartel.gov.co.

⁶³ Intelcon Research (note 52 above).

⁶⁴ Ley General de Telecomunicaciones (no 18.168 of October, Titulo IV, as amended by law 19.302 of March 1994).

⁶⁵ 1999 USF Regulations (note 54 above).

- equipment necessary to access the Internet;⁶⁶
- establishing telecentres and multi-purpose community centres;⁶⁷
- setting up public information terminals;⁶⁸
- providing assistance to small businesses and co-operatives to acquire and construct infrastructure in order to bring telecommunication services to under-serviced areas;⁶⁹ and
- facilitating the provision of multimedia services.⁷⁰

Many of the possible applications of monies in the USF that are listed in section 66 of the Telecommunications Act, have not been implemented yet. However, the use of the monies for the rollout of telecentres and multipurpose community centres (MPCC), both places where users have shared access to telecommunications services, as per section 66(1)(d) is an approach that was adopted by the USA early on. Telecentres have been identified as a development option to address the lack of access to telecommunications services in many countries, particularly developing countries. They, like public payphones, offer an alternative model for access in areas traditionally lacking telecommunications infrastructure, such as rural areas. Telecentres, providing basic telecommunications access, and their counterparts, MPCCs (Multi-purpose Community Centres), which provide an array of information, communication and technology (ICT) services, training and resources needed for community development, have been rolled out in several countries. In South Africa, many MPCCs have been provided by the Government Communications and Information Services (GCIS) in conjunction with the USA upon instruction of Cabinet through the final report of the communications task group (Comtask Report). The 1996 Comtask Report, and specifically recommendation 65 thereof, deals with the provision of communication and information to the public as guided by section 31(a) and (b) of the Constitution, to ensure that they improve the public's lives.⁷¹ MPCCs and telecentres seek to address this need.

The USA has historically seen its main role as being the establishment of telecentres. In its 2003 Business Plan, the USA states:

The past two years of the Universal Service Agency 2001/2002 and 2002/2003 have been spent mostly on evaluating the existing 21 school cyber labs and 68 telecentres (rolled out by the USA). Based on the Evaluation Report, the Agency took a decision to first consolidate the existing facilities and improve their performance before rolling out the new facilities. All 21 cyber labs have been found to be functioning well and the Agency is now ready to roll out another 1 000 in the next coming three years. 25 of the 68 telecentres were found to be not functioning well, and had to be relocated to the MPCCs. Some of the functioning 45 telecentres still require subsidies for continued operation.⁷²

Furthermore, the rollout of telecentres is included amongst the six core

⁶⁶ s 66(1)(c) of the Telecommunications Act.

⁶⁷ s 66(1)(d) of the Telecommunications Act.

⁶⁸ s 66(1)(e) of the Telecommunications Act.

⁶⁹ s 66(1)(f) of the Telecommunications Act.

⁷⁰ s 66(1)(g) of the Telecommunications Act.

⁷¹ Government Development Communications Initiative: Towards a Better Life Through Integrated Service and Information Delivery. See www.gcia.gov.za/mpcc/initiative/documents/policy/index.html.

⁷² USA/USF Business Plan, July 2003 para 1: Executive Summary.

programmes of the USA and the USF, as stated in the USA/USF Business Plan.⁷³ The other core programmes are:

- deployment of e-school cyberlabs;
- capacity-building for ICT services and universal access in the under-served areas through the Telecentre Association of South Africa in partnership with SMMEs and co-operatives;
- research into the provision of universal service and universal access in South Africa;
- the development and deployment of ICT infrastructure in the under-served areas;
- the marketing of the USA's ICT facilities and improvement of the corporate image of the USA.

Finally, the USA's three-year budget includes monies to be used for the purchase of computers, air conditioners, printers, blinds, insurance, Integrated Services Digital Network (ISDN), and photocopiers — all items integral to the running of a telecentre, this confirming the USA's intention to continue rolling out telecentres. Despite their potential, telecentres are most likely to function and be successful within a specific policy environment, one which develops and promotes the necessary support systems and the appropriate policies to allow for sustainable centres (eg ensure the involvement of women and gender equity in the development and implementation, promote sustainable and affordable pricing policy, and create financial incentives that promote investment).

The USA's rollout of telecentres has not necessarily been located in that type of policy environment. In fact, commentators argue that the USA's mandate was to facilitate the creation of such a policy environment instead of rolling out telecentres.⁷⁴ It is important to note that the spending of money on telecentres is only one of the USA's functions in terms of the Telecommunications Act and only one means of fulfilling the aims of the Telecommunications Act, inter alia, supplying low-cost, local communication services to under-serviced areas. It is not stipulated in the Telecommunications Act that this task must be carried out by the USA itself, and in practice, in order to ensure sustainability, it would be preferable that it not be carried out by the USA, but by commercial or community entities.

The 2001 Telecommunications Amendment Act allowed the USA to use monies in the USF for subsidies for universal access projects awarded by public competitive bid.⁷⁵ Such a subsidy has not been provided to date, but should such funds be awarded, the USA would be responsible for supervising the execution of any projects awarded in terms of a competitive bid.⁷⁶ Independent entities would then be in a position to use the funds to roll out such projects.

4.3.1 Comparison of the application of USF monies internationally

Universal service funds differ across jurisdictions in terms of the way in which the monies in the funds are used and the types of services they support. In Chile, the USF was initially designed to support access to basic telecommunications services

⁷³ Although it is not legally binding, it should be noted that the business plan is an articulation of the USA's understanding of its mandate.

⁷⁴ The South African Telecentre Development Project. See www.wed.idrc.ca/en/ev-8096-201-D-1-DO_TOPIC.html.

⁷⁵ s 67A(3) of the Telecommunications Amendment Act.

⁷⁶ s 67A(4) of the Telecommunications Amendment Act.

in people's homes and has since been expanded to include telecentre projects. The focus on telecentres in Chile was developed only after basic access targets had been achieved. This is the reverse of the South African approach where, from the outset, telecentres have been seen as a priority project of the USA.⁷⁷

Section 67A(3) of the Telecommunications Act makes provision for the disbursement of the funds through competitive bidding processes in which the subsidy is awarded to the bidder with the requisite technical experience with the lowest subsidy request.⁷⁸ This approach to applying the monies in the USF is in line with the approaches adopted in Chile,⁷⁹ Peru⁸⁰ and Uganda,⁸¹ where competitive tenders have been issued.

5. RESTRUCTURING OF THE USA

Since its inception in 1997, the Act provided that the USA would be dissolved after a period of at least five years by the President of South Africa (the President), and its functions transferred to Icasa.⁸² This five-year lifespan was a result of the recognition of the fact that a specialised body to deal with universal service and universal access would be a short-term measure to deal with the issues.

The Telecommunications Act was amended in 2001. At that time, the issue of universal access was debated in Parliament along with other issues. The question was posed: is there a need for a separate USA to perform the functions of the USA? Or can the sector-specific regulator perform such functions? In making an assessment, it was necessary to examine the original motivation for the establishment of the USA:

In designing the universal service agency, and incorporating it into the Telecommunications Act, it will be important to keep in mind the concern expressed by the Minister and reflected in many submissions to the Green Paper, that classic approaches to managing the implementation of telecommunications policy would not be sufficient to keep the focus on the goal of universal service long enough to redress the existing imbalances. The apartheid system left the vast majority of black South Africans, particularly in rural communities, without access to basic communications services. Liberalisation trends associated with the spread of the global information highway and the legitimate needs of South African business and urban areas for advanced services could easily combine to draw interest and resources away from the delivery of service to rural and disadvantaged areas. The potential development impact of telecommunications would be limited; the opportunity would be lost for South Africa to leapfrog traditional stages of development through the use of telecommunications to foster the application of new information technologies. Telecommunications infrastructure would not be applied as effectively and as quickly as it might to redress historic imbalances not only, perhaps not even primarily, with respect to access to basic communications but also with respect to many development sectors including health, education, employment and income generation.

⁷⁷ USA/USF Business Plan July 2003

⁷⁸ Intelecon Research (note 52 above).

⁷⁹ B Wellenius 'Closing the Rural Communication Access Gap: Chile 1995-2002' World Bank, Infodev, Washington, DC, November 2001. See http://www.infodev.org/library/chile_rural/Chile%20-%20final%2017%20december%2001%20-%20revised.pdf.

⁸⁰ Rural Telecommunications and Universal Access in Peru: Fund for Investment in Telecommunications (FITEL). Osiptel Publication. 2001.

⁸¹ Rural Communications Development Policy in July 2001. <http://www.ucc.co.ug/rcddf/about.html>.

⁸² s 64 of the Telecommunications Act.

While universal service is a global concern, it is located within a unique context in South Africa. Nowhere else does such disparity of access exist side by side with a developed communications technology sector. Nowhere else are both access and ownership concentrated so heavily in one population group. These imbalances, which are the legacy of apartheid, must be urgently redressed. Members of historically disadvantaged communities, and particularly those in rural areas, must be the immediate targets for the delivery of universal service. The universal service agency is a South African response to this very particular South African social, economic and political environment.⁸³

The USA was identified in the White Paper as a South African response to a unique South African social, economic and political environment. Given South Africa's unique history, it was recognised that traditional approaches to managing the implementation of telecommunications policy would not be sufficient to keep the focus on the goal of universal service and universal access long enough to redress the existing imbalances, and thus the specialised USA was necessary. After a re-examination of the relevance and role of the USA in 2001 by Parliament, it was decided that there is still a role for a specialised USA to play, but that such USA would have to be restructured to become more effective.

The process of restructuring the USA got underway and in 2002 a new board was appointed by the Minister in terms of section 58(2) to oversee its functions.⁸⁴ The USA board members have been appointed for a period of three years, unless the Minister determines otherwise, the board is chaired by the current Director-General of the Department of Communications, and has seven members drawn from industry and the public sector.⁸⁵ The USA board is supported by the head of the USA, who is also appointed by the Minister and is responsible for staffing the organisation and its day-to-day management.⁸⁶

Notwithstanding the fact that during the recent 2001 amendment process the provisions of section 64 of the Telecommunications Act were not triggered, it is still possible for the President to proclaim that the USA be dissolved and that its functions be carried out by Icasa. Such a decree would necessarily invoke the lapsing of all sections in the Telecommunications Act that deal with the establishment of the USA.⁸⁷

6. TELKOM'S EXCLUSIVITY AND UNIVERSAL SERVICE

6.1 Background

The 1996 White Paper stated as policy Telkom's five-year exclusivity right. This right was further entrenched in the Telecommunications Act and in Telkom's service licence. Telkom was authorised to provide, on an exclusive basis, national long-distance, international and local-access telecommunication services, and public payphone services, telecommunication facilities for the provision of Vans and PTNs,⁸⁸ and telecommunications facilities comprising fixed lines for the

⁸³ White Paper (note 2 above) 1.13 and 1.14.

⁸⁴ Appointment of the Board of the Universal Service Agency GN 1358/2002 GG 23536 dated 5 August 2002.

⁸⁵ USA Board Appointment regulations (see note 84 above).

⁸⁶ s 60 of the Telecommunications Act.

⁸⁷ s 64(a) and (b) of the Telecommunications Act.

⁸⁸ Except PTNs referred to in s 41(2)(b) of the Act.

⁸⁹ Telkom PSTS Licence GN 768/1997 GG 17984 dated 7 May 1997, condition 3.1(a)-(g).

provision of MCTS.⁸⁹

The approach of providing exclusivity was identified as a means of promoting certain goals for the sector, including the expansion of the telecommunications infrastructure and the attainment of universal service.⁹⁰ The timing of the exclusivity period was made flexible. Telkom was given five-year exclusivity,⁹¹ with a possible extension to six years of one or more of the elements of PSTS, at Telkom's written request, based on satisfying licence conditions relating to universal service obligations by May 2002.⁹² Telkom did not request such an extension.

During the period of exclusivity, Telkom was assigned a critical role as the primary provider of universal service and universal access. Telkom's universal service and universal access obligations in terms of its PSTS licence included basic service provision,⁹³ the provision and maintenance of public payphone services,⁹⁴ the provision of emergency services,⁹⁵ arrangements for services for users with special needs⁹⁶ and the promotion of affordability.⁹⁷ Telkom was further required to file rates with the Authority pursuant to the Rate Regime determined pursuant to section 45(2) of the Telecommunications Act, which Rate Regime could be modified three years after the effective date of the licence.⁹⁸ The revised Rate Regime, according to Telkom's PSTS Licence, would have to reflect a reasonable balancing of interests of the customers and those of Telkom itself, and take into account its universal service obligations.⁹⁹

6.2 Rollout Obligations

Telkom's rollout targets were divided into rollout targets and new line rollout targets, which were to be measured annually. Telkom's cumulative targets are reflected in Table 1.

Table 1: Telkom's cumulative rollout figures¹⁰⁰

Category	Description	Total 1997-2002 (Year 1-5) target	Total Variance actual
Total line target	Total number of new access lines brought into service (excluding public payphone lines)	2 690 000	2 673 522 (16 448)

⁸⁹ White Paper (note 2 above) 2.6

⁹⁰ Telkom Licence (note 89 above) 3 and s 32(1) of the Telecommunications Act.

⁹¹ Telkom Licence (note 89 above) A.2, in terms of which Telkom could if by the fourth anniversary of its effective date it had exceeded 90 percent of the cumulative five-year total line target and 80 percent of the cumulative under-served area licence target, request in writing an extension of the exclusivity period for a further and final year. However, this would be done on condition that Telkom's total line target would be increased to a total of three million lines and the under-served area line target would be increased in the same proportion.

⁹² Telkom Licence (note 89 above) 4.1.

⁹³ Telkom Licence (note 89 above) 4.2.

⁹⁴ Telkom Licence (note 89 above) condition 4.3.

⁹⁵ Telkom Licence (note 89 above) 4.4.

⁹⁶ Telkom Licence (note 89 above) 4.5 and Schedule C.

⁹⁷ Telkom Licence (note 89 above) 7.1.

⁹⁸ Telkom Licence (note 89 above) 7.2.

⁹⁹ Telkom Licence (note 89 above) Schedule A and Telkom Report of Licence Obligations (2002).

Category	Description	Total 1997-2002 (Year 1-5) target	Total actual	Variance
Under-serviced ¹⁰¹ line target	Number of new access lines in defined under-serviced areas (included in Total line target)	1 676 000	1 787 968	110 968
Priority Customer ¹⁰² target	Number of new access lines for Priority Customers, as defined	20 246	25 577	5 331
Village ¹⁰³ target	Number of villages served in under-serviced areas (included in Total line target and Under-serviced line target)	3 204	2 699	(505)
Public Payphone target	Total number of public payphones (not included in Total Line target and Under-serviced line Target)	120 000	132 990	12 990
Replacement line target ¹⁰⁴	Number of replacement lines (not included in Total line target)	1 252 000	1 159 668	(92 332)

Using Telkom's 2002 figures, South Africa had a fixed-line teledensity of 11,4 percent, representing an increase over the 1997 figure of 9,6 percent.¹⁰⁵ As of 2002, Telkom had rolled out approximately 2,6 million additional lines, bringing the total number of fixed lines (excluding payphones) to 4,9 million. Telkom elected not to roll out lines in its last year of exclusivity where it was not economical to do so.¹⁰⁶ In so doing, of all of the targets stipulated, Telkom missed the total line and village targets, as reflected in Table 1, and paid a penalty of R10 183 285 to Icasa.¹⁰⁷

Owing to significantly high levels of churn, or a high number of subscribers falling off the network, the net line growth was only 665 819 main telephone lines, and 195 399 payphones in South Africa. Thus, while Telkom substantially met its rollout objectives, save for the total line target and the village target, there are still

¹⁰¹ In terms of the Telkom Licence (note 89 above), an under-serviced area 'means (a) any township; (b) any local exchange area listed in Schedule F and represented in the accompanying maps, where as of June 1996 the number of residential exchange lines as a percentage of households was less than or equal to fifty percent; and (c) any local exchange area created after June 1996 where the number of residential exchange lines as a percentage of households was less than or equal to fifty percent as of June 1996, provided, however, the Authority may, subject to condition 13.5, reasonably object in writing to the classification of any such local exchange area within 30 days after receiving written notification from the licensee of the creation of any such local exchange area.'

¹⁰² In terms of the Telkom Licence (note 89 above), a priority customer 'means a hospital, library, local authority or school.'

¹⁰³ In terms of the Telkom Licence (note 89 above), a village 'means a community located in an under-serviced area with between 100 and 1,999 inhabitants which is without an exchange line from the effective date (7 May 2002).'

¹⁰⁴ In terms of the Telkom Licence (note 89 above), the replacement line target refers to 'the total number of new digitalised exchange lines to be brought into service in order to replace existing non-digitalised exchange lines as specified for the relevant financial year in Schedule A.'

¹⁰⁵ ITU World Telecommunications Development Report (note 12 above) A-79. Although the 2001 census data is relevant, it is not useful for comparative purposes because it is not compiled as frequently as the ITU data, which is compiled annually and thus provides an annual comparison. As such, for the purposes of this discussion, the ITU data, which uses consistent criteria across surveys, is a better reference point to demonstrate the increase in fixed-line teledensity.

¹⁰⁶ Telkom Prospectus (30 January 2001) 134.

¹⁰⁷ Telkom Report on Licence Obligations (2002) 14.2.

issues outstanding in the regulatory framework which make it difficult to state that Telkom has gone as far as was required in addressing universal service. No audit has been conducted by the regulator of Telkom's rollout during the exclusivity period.

A key issue, by Telkom's own admission, which has affected its ability to deliver on its obligations is that of discontinuation of services).¹⁰⁸ In some of the rural areas where Telkom installed new lines, the rates of discontinuation have been as high as between 50 percent and 70 percent. Most lines were disconnected within a few months of activation due to economic (and not technical) reasons.¹⁰⁹ The effect of Telkom's exclusivity has been the installation of lines in the under-serviced areas, but not necessarily the maintenance of those lines.

Telkom had further service-related targets with respect to the reduction of the waiting list from 600 customer fault reports per 1 000 residential lines in 1997/1998 to 390 in 2001/2002. The figure with respect to business lines was a reduction from 580 per 1 000 to 370 in the same period.¹¹⁰ Further waiting list targets were set out which dealt with the serviceability of payphones, the percentage of orders met within a specified number of days and the percentage reduction of the existing waiting list at the time by 100 percent by October 1998 for business customers and payphone renters, and by October 1999 for residential customers.¹¹¹ The only area in which Telkom failed, based on its own evaluation, with respect to the quality of service targets, is in the category of 'fault rate per 1 000 lines for residential customers'. Telkom's target fault rate was 390, whereas 547 residential faults were reported. For this shortfall, Telkom paid a penalty of R383 199 to Icasa.¹¹² At July 2004, Telkom's ability to meet the targets set out in its licence had not been audited independently by the regulator.

7. MOBILE CELLULAR TELECOMMUNICATIONS SERVICE OPERATORS' ROLE IN PROVIDING UNIVERSAL SERVICE AND UNIVERSAL ACCESS

South Africa has not relied solely on Telkom to achieve its universal service and universal access goals and has, in addition, made deliberate regulatory interventions with other service providers. In the White Paper it was foreseen that other existing network operators, such as the MCTS operators, would work towards the attainment of universal access in particular through CSOs (Community Service Obligations) and joint economic development (JED) obligations stipulated under their licences.¹¹³ At the time, the success of mobile outside of these obligations, and in particular mobile prepaid, in achieving the sector objectives with respect to universal service and universal access was not anticipated.

7.1 MTN and Vodacom Community Service Obligations

Given the rapid growth in the MCTS sector, and the advantages of wireless technology for rural rollout, great reliance has been placed on the MCTS providers

¹⁰⁸ Telkom Annual Report (2002) 24.

¹⁰⁹ P Benjamin and M Dahms 'Background Paper on Universal Service and Universal Access Issues', Telia Telecommunications in Society Seminar, Sweden, June 1999.

¹¹⁰ Telkom Licence (note 89 above) Annexure B, Table II.

¹¹¹ Telkom Licence (note 89 above) Annexure B, conditions K-M.

¹¹² Telkom Annual Report (note 108 above) table XV.

¹¹³ White Paper (note 2 above) 2.9.

to assist in the attainment of key universal service and universal access goals through their commercial rollout and mandatory obligations. Mandatory obligations were placed upon Mobile Telephony Networks (Pty) Ltd (MTN) and Vodacom (Pty) Ltd (Vodacom) when they were granted licences in 1993 - three years before the promulgation of the Telecommunications Act and the establishment of a telecommunications regulator.¹¹⁴

In 1993, Vodacom was given a CSO of 22 000 phones¹¹⁵ and MTN 7 500¹¹⁶. The operators were required to install these phones in under-serviced areas within a period of five years and to provide the service at a specially regulated, non-competitive tariff. The issue of affordability is addressed through the regulation of CSO tariffs.¹¹⁷ No coordinating mechanism was used by the operators and the regulator to determine where to roll out these obligations — thus, the mobile operators installed CSOs in under-serviced areas (as defined by the operators themselves within geographic limits stipulated in an annexure to their licences), and sometimes, right next to each other inadvertently creating competition in such areas which was not the intention of the policy-makers.¹¹⁸ However, although the broad areas in which they could do their CSO rollout were designated in the operators' licences, they proceeded without a workable definition of under-serviced areas to determine whether the areas where they have installed CSTs are truly under-serviced. Furthermore, although both MTN and Vodacom claim to have met their targets, an audit of the MCTS operators' rollout, their compliance with CSOs, and the actual impact of same, has not been independently confirmed.¹¹⁹

7.2 Cell C (New Entrant) CSOs

Cell C (Pty) Ltd ('Cell C'), the third mobile cellular operator, was issued a licence in 2001. It is required to provide 52 000 community service telephones over seven years, which means that the third MCTS operator's CSOs are nearly double those of the incumbents combined. However, that figure is what Cell C promised in its licence application, and universal service strategy was an important criterion in the evaluation of the applications received.¹²⁰

It appears that the regulator learned from the difficulties it experienced in monitoring the implementation of MTN's and Vodacom's CSOs. With regard to its CSOs, in order to ensure that the areas being served by CSTs are truly under-serviced, and in order to ensure some level of coordination with respect to their rollout, Cell C, in terms of its licence, must submit a rollout plan to the regulator

¹¹⁴ Issue of Licences to Provide National Cellular Telecommunications Services GN 1078/1993 GG. 15232 dated 29 October 1993, as amended by Issue of Licence in terms of section 37(1) of the Act to provide National MCTS GN 1483/2002 GG 23760 (Vodacom Licence) and GN 1484/2002 GG 23760 (MTN Licence). The licences were amended to bring them in line with the new legislative framework; however, no substantive amendments were effected and as such no universal service obligations were changed.

¹¹⁵ Vodacom Licence (note 115 above) 4.1 and Schedule 2A.

¹¹⁶ MTN Licence (note 115 above) Schedule 2B.

¹¹⁷ MTN and Vodacom Licences (note 115 above) 13.6.

¹¹⁸ MTN and Vodacom Licences (note 115 above) 4.2 in which it is stated that the implementation of the CSOs could be co-ordinated between the licensees and Telkom under the chairpersonship of the then Postmaster General.

¹¹⁹ Vodacom Licence (note 115 above) Schedule 2A; MTN Licence (note 115 above) Schedule 2B, in the first three months after the fifth anniversary, when MTN and Vodacom's CSO targets should be met, the number of Community Service Telephones (CSTs) installed and operated by the licensees will be reviewed by the Authority in conjunction with the licensees.

¹²⁰ Recommendation in terms of section 35(2)(b)(i) of the Telecommunications Act, 103 of 1996 for the Third MCTS Licence (4 July 2000) Icasa, 92.52, 207 states that 'Cell C's universal service proposal was significantly better than that of all the other applicants'. Paragraph 93 states that 'the empowerment and universal service aspects of Cell C's application were superior to those of other applicants. These features of Cell C's application gave it an advantage over the other applicants.'

for approval before it installs CSTs.¹²¹ This is different from the obligation placed on the MCTS incumbents, who had an implementation table which listed the broad areas in which CSOs could be placed and gave the right to roll out in any of those prescribed areas. It is this method that made it difficult for the regulator to monitor where the CSOs were being installed, and it did not take into account the changes in the socio-economic development of such areas, or the change in teledensity in these areas over time.

Again different from the obligations placed upon the incumbents, before it rolls out its CSOs, Cell C must agree upon performance indicators with the regulator. These performance indicators set standards with regard to universality, accessibility, the extent to which the CSTs are usable, maintained and meet the needs of historically disadvantaged persons.¹²²

Similarly to Vodacom's and MTN's CSOs, the implementation of Cell C's CSOs may be coordinated among themselves, other MCTS operators, PSTS operators and the USA under the supervision of the Authority.¹²³

In terms of its licence, like MTN and Vodacom, Cell C must meet geographic and area population targets. Cell C must meet geographic targets of eight percent of the territory within the first five years and 40 percent, inclusive of territory covered via roaming agreements,¹²⁴ and area population targets of 60 percent over the same five-year period with a minimum of 80 percent area population coverage within one year of the commercial date by means of domestic roaming agreements.¹²⁵ This is to ensure that in deploying its commercial network, Cell C covers as much of the country as possible and does not limit itself to more lucrative urban areas alone.

7.3 MCTS Commercial Rollout

Cellular subscribers have increased from 535 000 in 1995 to approximately 12 million in 2002.¹²⁶ In 2001 mobile users in South Africa surpassed the number of fixed line users. This trend was replicated globally in 2002.¹²⁷ MCTS has played an important role in addressing universal service and universal access through both its commercial services, as well as its CSOs. This is made possible by the technology employed in terms of its ability to cover the country more comprehensively at a lower cost, and its mobility, as well as the development of prepaid services, which are attractive to low-income users.

Vodacom's subscriber base is more than 7,8 million with 6,6 million prepaid customers and 1,2 million post-paid customers as of March 2003.¹²⁸ MTN, during the same period, had 4,7 million customers, with the bulk being prepaid customers.¹²⁹ Cell C achieved its stated target of 2 million subscribers before 1 August 2003 and more than 95 percent of Cell C's customers are prepaid subscribers.¹³⁰

¹²¹ Cell C MCTS Licence published under GN 1601/2000 GG 22429 A2.2

¹²² Cell C MCTS Licence (note 122 above) A2.6.

¹²³ Cell C MCTS Licence (note 122 above) A2.7

¹²⁴ Cell C MCTS Licence (note 122 above) A1.1.

¹²⁵ Cell C MCTS Licence (note 122 above) A 1.2.

¹²⁶ ITU World Telecommunications Development Report 2002: Reinventing Telecoms 6 ed (2002).

¹²⁷ ITU World Telecommunications Development Report (note 128 above).

¹²⁸ Vodacom Annual Report, 2003. See <http://www.vodacom.co.za/about/reports.asp>.

¹²⁹ MTN Interim Results for 30 September 2003. See <http://www.mtngroup.com>.

¹³⁰ Cell C exceeds growth targets for second consecutive year. Press release issued by Cell C on 14 August 2003.

7.4 The Role and Relevance of Prepaid Technology

Pre-paid technology has proven to be a significant factor in the high take-up of MCTS in South Africa and internationally. Even though, in terms of the actual tariffs charged, prepaid is often less affordable on a per-minute or per-second basis than post-paid, it has other advantages that encourage the public to select it as a means of accessing telecommunications services. This is particularly so as low-income users need more than low prices.¹³¹ Pre-paid is an attractive option owing to several factors, namely:

- the ability for users to control their spending;
- the ability to receive calls without having to pay costs additional to the SIM card cost;
- simple sign-up without credit vetting or the need for a bank account; and
- no binding long-term service agreement.

The high prepaid take-up in South Africa is not unique. In Africa (excluding South Africa) approximately 90 to 95 percent of total mobile customers use prepaid accounts.¹³² As a result Telkom, like some other fixed line operators¹³³ has also introduced prepaid fixed telephony.¹³⁴

7.5 MCTS Joint Economic Development Agreements

In addition to their respective CSOs, all three MCTS operators have entered into Joint Economic Development (JED) agreements with the regulator.¹³⁵ JED agreements are local economic support contracts in which the MCTS operators undertook to assist the government in economic development through job creation, local exports, boosting foreign investment, forging international linkages, research and development, the training of local personnel, the establishment of regional headquarters in South Africa, and developing local value-added technology.¹³⁶ Each category of JED activity attracts a specific and different weighting, with a preference given for activities directly related to the telecommunications sector and other related areas associated with the provision of MCTS.¹³⁷ The aim is to encourage corporate social responsibility beyond CSOs.

A JED target of R1 billion was set for all three MCTS operators to be achieved over a 10-year period. MTN and Vodacom also had ancillary targets of R400 million and R100 million respectively. In terms of a JED agreement, fulfilment of the commitments under the agreement would be a significant factor in the decision on whether to renew the MCTS licences after their initial 15-year licence terms.¹³⁸

¹³¹ S Oestmann. *Mobile Operators: Their Contribution to Universal Service and Public Access*, (2003) Intelcon Research & Consultancy Ltd 3.

¹³² Oestmann (note 132 above) 5.

¹³³ Oestmann (note 132 above) 4. PSTS operators such as N-Soft in Gabon, Brazil Telecom, PLDT in the Philippines, Telmex in Mexico and CANTV in Venezuela have introduced prepaid.

¹³⁴ Recognising that prepaid is a key tool to address accessibility and affordability, Telkom has offered prepaid to its PSTS customers. In 1998, Telkom was the first company in the world to provide prepaid services on a fixed-line network and had 707 881 prepaid subscribers as at March 2002: Telkom Annual Report (2002) 24.

¹³⁵ MTN and Vodacom Licences (note 115 above) clause 5.1(b)(ii); Annexure A3 of Cell C MCTS Licence (note 122 above).

¹³⁶ Memorandum of Understanding on the JED Plan attached to the National Cellular Telecommunication Licence entered into between the Department of Posts and Telecommunications, MTN and Vodacom (JED agreement).

¹³⁷ Paragraph 13.3, JED agreement (MTN and Vodacom) para 9(ii), JED agreement (Cell C).

¹³⁸ JED agreement (note 137 above).

¹³⁹ MTN and Vodacom JED agreement (note 137 above) 13.3 Cell C JED agreement (Cell C) 9(ii).

Both MTN and Vodacom met the JED requirement of over R1 billion invested in local development within three years of being given the targets. The regulator had an opportunity to increase the JED targets set in Cell C's licence conditions, but set the target at what some observers have seen as a low one of R1 billion over 10 years. This was done in order to ensure that Cell C was given similar targets to ensure a level playing field with respect to licence conditions and obligations.

8. TELECOMMUNICATIONS AMENDMENT ACT: BEYOND PSTS AND MCTS, A SHIFT IN THINKING ABOUT UNIVERSAL ACCESS

8.1 Background

The 2001 Telecommunications Amendment Act marked a shift in thinking on universal service and universal access policy in South Africa. It made provision for the licensing of additional operators to compete with inter alia Telkom, given that Telkom's de jure exclusivity was due to expire in 2002. The Telecommunications Amendment Act also recognised that telecommunications services have moved beyond basic voice services provided by PSTS and MCTS operators. It recognised that issues around access to enhanced services must be considered.

Access to enhanced services can to some extent be catered for by the USF, as described earlier, to which licensees, including Internet Service Providers (ISPs) contribute, and which is to be used, in terms of the Telecommunications Amendment Act, to facilitate 'the provision of multimedia services' and to 'provide subsidies to public schools and training institutes to facilitate Internet access'.¹³⁹

The 2001 Telecommunications Amendment Act also established an e-rate (education rate).¹⁴⁰ It also made explicit the issuing of obligations for access to the 1800 MHz spectrum and third generation (3G) spectrum.¹⁴¹ It also made provision for the licensing of new operators, including the SNO,¹⁴² Sentech (Pty) Ltd¹⁴³ and USALs.¹⁴⁴ These provisions, introduced by the Telecommunications Amendment Act, further the objectives enshrined in section 2 of the Telecommunications Act with respect to universal service and universal access; they also support objectives such as:

- promoting the provision of a wide range of telecommunication services in the interests of the economic growth and development of the Republic;¹⁴⁵
- encouraging investment and innovation in the telecommunications industry;¹⁴⁶
- encouraging the development of a competitive and effective telecommunications manufacturing and supply sector;¹⁴⁷
- promoting the development of telecommunication services that are responsive to the needs of users and consumers;¹⁴⁸

¹³⁹ s 66 of the Telecommunications Act.

¹⁴⁰ s 45(3) of the Telecommunications Act.

¹⁴¹ ss 30A and 30B of the Telecommunications Act.

¹⁴² s 32B of the Telecommunications Amendment Act.

¹⁴³ s 32C of the Telecommunications Amendment Act.

¹⁴⁴ s 40A of the Telecommunications Amendment Act.

¹⁴⁵ s 2(b) of the Telecommunications Amendment Act.

¹⁴⁶ s 2(d) of the Telecommunications Amendment Act.

¹⁴⁷ s 2(e) of the Telecommunications Amendment Act.

¹⁴⁸ s 2(f) of the Telecommunications Amendment Act.

- ensuring that, in relation to the provision of telecommunication services, the needs of local communities and areas are duly taken into account;¹⁴⁹
- ensuring compliance with accepted technical standards in the provision and development of telecommunication services;¹⁵⁰
- ensuring fair competition within the telecommunications industry;¹⁵¹
- promoting the stability of the telecommunications industry;¹⁵²
- encouraging ownership and control of telecommunication services by persons from historically disadvantaged groups;¹⁵³
- protecting the interests of telecommunications users and consumers;¹⁵⁴
- promoting small, medium and micro-enterprises within the telecommunications industry;¹⁵⁵
- ensuring efficient use of the radio frequency spectrum;¹⁵⁶ and
- promoting the empowerment and advancement of women in the telecommunications industry.¹⁵⁷

8.2 E-rate

The Telecommunications Amendment Act recognised the importance of information and communications technologies (ICT) as an educational tool. It addresses affordability by academic institutions, and in particular public schools as defined in the South African Schools Act, 84 of 1996 and public and further education and training institutions in terms of the Further Education and Training Act, 98 of 1998. Section 45(3) of the Telecommunications Amendment Act stipulates that such schools shall be entitled to a 50 percent discount on all telecommunications calls to an Internet Service Provider (ISP) and any connection or similar fees or charges levied by an ISP for accessing the Internet.¹⁵⁸ Public schools will be entitled to this discount, also known in other jurisdictions as an e-rate, from a date still to be determined by the Minister.¹⁵⁹ As at July 2004, some three years since the promulgation of the 2001 Telecommunications Amendment Act, this date had not been set by the Minister.

8.3 Issuing of 1800 MHz and 3G Spectrum

In terms of sections 30A and 30B of the Telecommunications Act, PSTS licensees, MCTS licences and USALs are entitled access to 1800 MHz spectrum in exchange for a frequency spectrum fee to be determined by the Minister¹⁶⁰ and against such obligations as may be determined by Icasa.¹⁶¹ The Act identified access to 1800 MHz spectrum and 3G spectrum as a means of achieving universal access and the Minister in October 2003, set the fees for access to 1800 MHz spectrum and 3G

¹⁴⁹ s 2(g) of the Telecommunications Amendment Act.

¹⁵⁰ s 2(i) of the Telecommunications Amendment Act.

¹⁵¹ s 2(j) of the Telecommunications Amendment Act.

¹⁵² s 2(j) of the Telecommunications Amendment Act.

¹⁵³ s 2(k) of the Telecommunications Amendment Act.

¹⁵⁴ s 2(l) of the Telecommunications Amendment Act.

¹⁵⁵ s 2(m) of the Telecommunications Amendment Act.

¹⁵⁶ s 2(n) of the Telecommunications Amendment Act.

¹⁵⁷ s 2(q) of the Telecommunications Amendment Act.

¹⁵⁸ s 45(3)(b) of the Telecommunications Amendment Act.

¹⁵⁹ s 45(3) of the Telecommunications Amendment Act.

¹⁶⁰ ss 30A(1)(b)(i) and 30B(1)(b)(i) of the Telecommunications Amendment Act.

¹⁶¹ ss 30A(1)(b)(ii) and 30B(1)(b)(ii) of the Telecommunications Amendment Act.

spectrum¹⁶². The Authority must determine the obligations against which such fee shall be paid and may make such obligations universal service and universal access obligations.

8.4 Sentech: Rolling out Multimedia

An examination of the multimedia telecommunication service licence issued to Sentech makes it clear that the policy framework takes into account the limitations of some of the previous licences in terms of contributions to universal service and universal access. Sentech has been given as its CSOs the establishment and maintenance of Internet laboratories (computer laboratories with Internet access) in 500 schools in rural areas within six years of the effective date of the licence, which is 7 May 2002. Before rolling out its CSOs, Sentech must, like Cell C, submit an implementation plan to the Authority. An implementing body will be established to manage the process of the rollout, funded by Sentech.¹⁶³

Sentech's CSOs represent a shift from a focus on promoting universal service and universal access to basic voice service, to one of encouraging access to enhanced services. Of equal importance is the prescription of a coordinating mechanism to oversee the rollout of Sentech's CSOs.

In 2002, Sentech applied to Icasa to amend the terms and conditions of its multimedia services licence issued in terms section 32C(6).¹⁶⁴ In its application, Sentech requested that clause 5.2 and Annexure A of its multimedia services licence be deleted in their entirety. This in effect meant the deletion of Sentech's CSOs. Sentech argued that the extent and cost of the CSOs imposed on it was great. It further argued that CSOs had been imposed and that they were not related to its licensed activities. For example, as part of its CSOs, Sentech is required to provide local area networks, workstations with enhanced functionality, furniture, secure and useable computer laboratories, technical training and the refurbishment and upgrading of buildings where appropriate.¹⁶⁵ Sentech has argued that these activities go beyond the scope of its Multimedia licence.

Sentech later revisited this position and in public hearings on the matter requested that the CSOs be revised downwards and not deleted in their entirety. It then proposed that the CSOs be limited to the provision of Internet access in the form of connectivity for 500 schools, and that all costs associated with the provision of infrastructure and facilities be borne by other entities involved in the management of the rollout of ICT projects to schools or by the schools themselves.¹⁶⁶ Sentech will be obliged to roll out Internet access at the e-rate to 1,500 rural public schools in terms of the amendments to its licence, over a period of nine years, and according to a roll out programme to be included in the licence.

¹⁶² Ministerial Determination of 1800 MHz Spectrum Fee GN 2530/2003 GG 25513 dated 1 October 2003); and Ministerial Determination of 3 GHz Spectrum Fee GN 2531/2003 GG 25513 1 October 2003.

¹⁶³ Sentech Multimedia Telecommunications Service Licence published under GN 686/2002 GG 23405 A2 and A3.3.

¹⁶⁴ GN 984/2003 GG 24708 dated 3 April 2003.

¹⁶⁵ Proposed Amended Community Obligations of Sentech Limited in Respect of its Multimedia Service Licence issued on 6 May 2003; Sentech submission to Icasa, 8 August 2003. Available at Icasa.

¹⁶⁶ Sentech submission (note 166 above) 3.

8.5 Under-serviced Area Licences

The White Paper acknowledged that by simply opening the local access market to competition at the end of Telkom's exclusivity, the lack of access to telecommunications services in rural and remote areas would not necessarily be addressed.¹⁶⁷ The White Paper further expressed a concern that the considerable amount of investment required in infrastructure, and the low population densities in rural areas, might deter new entrants from rolling out services in under-serviced areas post-exclusivity. Thus, in the policy, provision was made for small-, micro- and medium-sized enterprises (SMMEs) and co-operative organisations to build local loops, utilising new technologies.¹⁶⁸ The Telecommunications Amendment Act, five years later, makes provision for a new category of licence called a USAL (Under-serviced Area Licence) to address that concern.

Section 40A of the Telecommunications Act empowers the Authority to issue USALs to small businesses,¹⁶⁹ giving preference to businesses that include persons from historically disadvantaged communities, and in particular women.¹⁷⁰ Although in terms of the legislation USALs were to come into effect from 7 May 2002,¹⁷¹ the invitations to apply for 25-year licences were issued in May 2004, for the provision of services in the Northern Province (now Limpopo Province), KwaZulu-Natal, Eastern Cape, Free State and Northwest province¹⁷².

In July 2004 Icasa made recommendations on seven short-listed bidders to the Minister of Communications. USAL applications were evaluated against the following criteria: ownership and control, consumer benefits, business plan, financial plan, empowerment, additional features and experience and credibility. Amongst these categories more weight will be given to ownership, control and empowerment.¹⁷³ To date Icasa has not issued the licences, but USALs will be licensed in areas with less than five percent fixed line teledensity as determined by the Minister.¹⁷⁴ The impact of mobile cellular penetration in those areas has not been factored into the analysis by the Minister since the definition of teledensity in the Telecommunications Act is the number of telephone lines per 100 persons.¹⁷⁵ Notwithstanding this, the Minister has declared 27 under-serviced areas.¹⁷⁶

A USAL is an explicitly technology-neutral licence. The holder of a USAL may use any technology that is efficient and effective in rolling out infrastructure and providing services to the community in which it operates.¹⁷⁷ From a policy perspective this is positive, as it is an approach that is not technologically biased. It moves the universal service discussion away from one of basic voice telephony to one of access to other enhanced services since technological restrictions are lifted. It also allows the licensees to use less costly technologies and determine which technologies are best suited to the areas in which they have been licensed to operate.

¹⁶⁷ White Paper (note 2 above) 2.19.

¹⁶⁸ White Paper (note 2 above) 2.19.

¹⁶⁹ Defined in the Telecommunications Act as a 'small business' as defined in s 1 of the National Small Business Act, 102 of 1996.

¹⁷⁰ s 40A(2)(b) of the Telecommunications Amendment Act.

¹⁷¹ s 40A(4) of the Telecommunications Amendment Act.

¹⁷² Under-Serviced Area Licence Invitation to Apply (USAL ITA) GN 3458/200 GG 24204 1.1.

¹⁷³ USAL ITA (note 173 above) 2.15.

¹⁷⁴ s 40A(1) of the Telecommunications Amendment Act. This is substantially different from the under-serviced area definition in Malaysia which sets the percentage at 20 in terms of the CMC Commission Determination on Universal Service Provision, Determination no 2 of 2001

¹⁷⁵ s 1 of the Telecommunications Act.

¹⁷⁶ GN 1389 of 18 December 2001 GG 29954 as amended by GN 276/21 February 2002 GG 23164.

¹⁷⁷ s 40A(3) of the Telecommunications Amendment Act.

However, the resources needed to roll out networks in under-serviced areas may pose a challenge to USALs. Another challenge will be fulfilling the requirement that they be owned by small businesses. In recognition of these challenges, the USAL ITA stipulates that USALs must pay an annual licence fee of only 0,1 percent of annual turnover from a period beginning two years after the licence is issued.¹⁷⁸ This recognises that the difficulties to be encountered by small businesses in raising the required capital from financiers to install and maintain a network in an area where other existing operators with greater financial resources have chosen not to. Further, they must pay only one rand per annum to the USF. This low contribution is presumably because USALs are potentially primary beneficiaries of the USF and limited assistance is available to USALs in that the monies in the USF can be used to subsidise the acquisition and construction of infrastructure.¹⁷⁹

8.5.1 Financing USALs

Generally, in other jurisdictions, two approaches are used for determining the subsidies required for telecommunications operators in rural areas. These may be used separately or to complement each other.

The first approach is to estimate the amount of the maximum subsidy using a financial cost model based on actual costing information.

The second is to let the market determine the final amount through a competitive bidding process, where the amounts bid by potential rural operators determine the level of the subsidy, but there is pressure on operators to submit low bids in order to win¹⁸⁰.

The latter process is favoured because it requires less information and fewer resources from the regulator and it allows the market to determine the financial requirements, and yet it has a built-in mechanism for ensuring that costs are not inflated, since the lowest bid wins. There is therefore an incentive for bidders to keep their costs as low as possible.

South Africa has adopted an approach of determining a maximum subsidy, but has used neither financial cost modelling nor competitive bidding. The USA undertook a public consultation process to determine the appropriate level of subsidies, and decided that all licensed USALs may apply to the USA for a maximum total subsidy of ZAR 15 million, to be disbursed over a period of three years from the date of issue of the licence.¹⁸¹ In terms of the policy guidelines issuance of the licence and disbursement of a further ZAR 5 million per year may be effected for two years subject to the achievement of rollout targets. The financial or economic basis for arriving at the subsidy is not clear.

8.5.2 International comparison of regional licences

Regional licences have been issued in several jurisdictions as a means of addressing universal service and universal access. These regional licences have been issued through competitive tenders, build-operate-transfer (BOT) methods, and as

¹⁷⁸ USAL ITA (note 173 above) 7.

¹⁷⁹ s 66(1)(f) of the Telecommunications Act.

¹⁸⁰ ITU World Trends Report (note 12 above) 87.

¹⁸¹ The USA released a 'Policy on the Subsidisation of USALs', which was distributed to USAL applicants but not published in the Government Gazette. The commitment with regard to subsidies is expressed in paras 2 and 3 of the document.

telecommunications co-operatives. All three approaches are different from what is being pursued in South Africa, as discussed below. South Africa's approach is to issue the licences through a 'beauty contest' or competitive application approach by which applicants submit applications in response to an invitation to apply.

The competitive application approach taken in Peru and Chile enabled the award of a licence to operators who were required to meet specified universal service and universal access targets, particularly with respect to public payphones. The award of the licence was linked to a competitive tender in which the bidder with the lowest required subsidy was awarded the licence by the regulator. Payment of subsidies was tied to project implementation and service quality. In the South African scenario, the USAL applicants will compete for licences in a given area based on evaluation criteria. In terms of the policy guidelines for the subsidisation of USALs that were issued by the USA, once licensed, and in a manner similar to that contained in the policies of the aforementioned countries, a portion of the subsidy would be disbursed upon issuance of the licence. The rest of the subsidy would be issued subject to the fulfilment of the rollout targets over the subsequent two years.¹⁸² The fundamental difference is that in South Africa, USALs will not be licensed based on any subsidy or a least-cost subsidy, but rather by competitive application.

Co-operatives are a model for rolling out telephony in which the community is involved in the telephone company both as subscribers and as shareholders or owners. Co-operatives have been used as a means of expanding access to rural and under-served communities in the United States, and more recently in Bolivia and Poland.¹⁸³ Bolivia has 15 regional co-operatives and members of each telecommunications co-operative pay a fee for subscription, which also entitles them to equity and voting rights in the phone company/co-operative. Thus the co-operative presents an empowerment model in which ownership and control rests in the hands of the community.¹⁸⁴ Each co-operative or operator holds an exclusive licence for its designated region for a specified period.

9. GENDER AND UNIVERSAL SERVICE AND UNIVERSAL ACCESS

The concept of universal access is not gender-neutral and an identified barrier to universal service and universal access provision is the lack of focus on women in universal service and universal access policy. This is a common issue internationally and it has been recognised that, without addressing the applicability of communications technologies generally and the Internet specifically to women, the success of a universal access policy will be limited.

In terms of section 40A(2)(b) of the Telecommunications Act, USALs are to be issued with preference being given to consortiums that include women and historically disadvantaged individuals. Further, among the objectives of the Telecommunications Act is the empowerment and advancement of women in the telecommunications industry.¹⁸⁵ It is thus envisaged that within South Africa's

¹⁸² USA Policy on the Subsidisation of USALs (note 185 above) para 5.

¹⁸³ A Gillwald 'Under-served Area Licences in South Africa: Steps to Achieving Viable Operators' LINK Centre Policy Research Paper no 3. Graduate School of Public and Development Management, University of the Witwatersrand, January 2003. See http://link.wits.ac.za/research/usal.htm#_Toc26352287.

¹⁸⁴ Datafile of Latin American Telecommunications (2000), CIT publications Ltd. See

http://banners.noticiasdot.com/termometro/boletines/docs/telcos/consultoras/citpubs/2000/cit_bolivia_telcos.pdf.

¹⁸⁵ s 2(q) of the Telecommunications Act.

policy imperatives it is necessary to include a special focus on addressing the needs of women in the provision of services, and to close the gender gaps in ICT policy, in general, and in universal service and universal access policy in particular. Despite the empowerment provisions in the legislative framework, as described, however, in practice this has not been an explicit factor in the implementation of universal service and universal access projects. Telecentres, for example, have not been focused on the needs of women as in other jurisdictions such as Bangladesh, where the success of the Grameen phone model¹⁸⁶ demonstrates the potential that women-owned and -operated telecentres have for rural development. Furthermore, no gender analysis is required for, or has been performed on, the allocation of monies in the USF for the development of universal service and universal access projects. Thus, although there is provision for ownership by women in USALs and in other licences, that is the current extent of the engendering of South Africa's universal service and universal access policy.

Conclusion

As a consequence of the complex socio-economic and political dynamics that previously existed in South Africa and which resulted in the extremely skewed distribution of telecommunications services, South Africa has to be additionally creative and more innovative in developing universal service and universal access strategies. Several approaches have been employed to address the skewed voice penetration. In addition, strategies are also being implemented to provide access to enhanced services. This chapter has compared these legislative and policy approaches to addressing universal service and universal access to those adopted in other jurisdictions. In some cases, and generally at a macro level - such as the establishment of a universal service fund, regional licences and the provision of exclusivity periods — these approaches are similar to those adopted in other countries. However, in some instances, there are differences in the way in which they are being implemented.

South Africa has put in place several policy tools to address universal service and universal access. These were reviewed in this chapter and include the establishment of a specialised USA and USF, the imposition of CSOs on telecommunications licensees, the provision of a defined exclusivity period on PSTS in exchange for universal service obligations, and the legislation of an e-rate and regional licences in under-served areas. In other jurisdictions these approaches have to varying degrees proven to be successful in attaining universal service and universal access; however, implementation of similar approaches has had mixed results in South Africa.

Notwithstanding the adoption of these policy tools, in terms of PSTS penetration it does not appear that much progress has been made towards achieving universal service. In respect of MCTS there has been greater progress and there is today a measurable difference in universal service as compared to 10 years ago. The growth in the mobile industry cannot be attributed solely to regulatory intervention as

¹⁸⁶ The Grameen Village Phone programme provides telecommunications facilities in rural areas while providing village phone operators who are predominantly poor women based in rural areas with an opportunity to earn an income. The project is administered by Grameen Telecom and Grameen Bank, a micro-credit lending institution. Available at www.grameenphone.com/village.htm.

much of the development has been as a result of commercial prepaid customers and not CSOs.

Notwithstanding the fact that South African telecommunications policy and legislation have a relatively strong gender bias, in that they encourage a consideration of ownership by women in licensing processes, including USALs, and they promote the empowerment of women and encourage other forms of participation by women, in terms of implementation, for example through licensing, there is a need for a specific focus on women.

The promulgation of the 2001 Telecommunications Amendment Act has created the space for several key universal access projects and has brought about some critical and fundamental changes to the sector, namely the development of the USAL category, the restructuring of the USA and the USE, the right of the regulator to impose terms and conditions for access to 1800 MHz spectrum¹⁸⁷ and 3G spectrum,¹⁸⁸ the legislation of discounts for educational institutions and the restructuring of the USA. But it is still too soon to tell what the impact of these measures will be and whether those connections will be made — and, more importantly whether they will be maintained.

¹⁸⁷ s 30A(1)(b)(ii) of the Telecommunications Amendment Act.

¹⁸⁸ s 30B(1)(b)(ii) of the Telecommunications Amendment Act.