

Experimenting with institutional arrangements for communications policy and regulation: the case of telecommunications and broadcasting in South Africa

Alison Gillwald, Learning Information Networking and Knowledge (LINK) Centre, Graduate School of Public and Development Management, Witwatersrand University

Abstract

This paper examines the shifting institutional arrangements in South Africa's telecommunications and broadcasting sectors as it seeks to deal with national transformation at the same time as the relentless economic and technical changes to the sector being driven at a global level. These include the convergence of traditionally distinct forms of communication resulting from the digitalisation of technologies and the privatisation and liberalisation of traditional monopoly services.

The author locates the changing institutional arrangements in this sector in the context of the struggle by government to transform decision-making and institutional arrangements. The tensions inherent in this process are not clear-cut, consistent or even clearly visible but impact in complex and cross-cutting ways on the policy framework and arising institutional arrangements.

The paper then periodises institutional arrangements in the broadcasting and telecommunications sectors into four overlapping phases: the pre-transition phase up to 1993; the reform phase up to 1997; the implementation phase which begins in 1994 in broadcasting and 1997 in telecommunications and the review phase which begins with broadcasting in 1998 and in telecommunications in 2001.

Although the institutional flux has often been attributed to forward looking policy it is argued that the perpetual reorganisation of the sector also reflects large scale institutional failure. It is argued however that this cannot be placed solely at the door of the various new regulatory institutions. Perhaps one of the most critical factors to undermine the various regulatory institutions has been the lack of resources. The lack of skilled human capital has allowed all three regulators to be out-regulated by the industry and the lack of financial capital has rendered them ineffectual both in defending their actions and fulfilling their mandate. The dearth of these have taken their toll on the ability of the regulator to be credible and one can only conclude reflects the covert desire of the industry and state for them not to be entirely effectual.

Finally, the paper argues that until there is an integrated and holistic national information and communication policy, driven from the Presidents Office, various policy proposals impacting on ICT development in the country emanating from different portfolios will continue to be contradictory, inconsistent and ultimately damaging to the vision of South Africa as a regional ICT hub and a major contributor to the African Renaissance.

Governance

South Africa's shifting institutional arrangements to deal with its broadcasting and telecommunications sectors, are indicative of enormous political and social transformation at the national level, in the context of rapid global change.

Nationally, the last decade saw protracted political negotiations. These culminated in the first democratic elections in the country in 1994 -- the victory of the African National Congress after more than half a century of struggle-- and the establishment of a Government of National Unity. At the same time trends towards the globalisation of the world economy and society were heightened by a number of technological and economic drivers. These included convergence, resulting from the digitalisation of technologies and the privatisation and liberalisation of traditional monopoly services.

All over the world new communication forms, such as the Internet, have rendered economic monopoly arguments redundant and made impossible traditional state controls of information and communication. This has undermined the classical understanding and practice of the sovereign State, shifting power upwards to global markets and multilateral forums, and downwards to local authorities, communities and individuals. [\(1\)](#)

The effects of greater access to information have been seen in increased participation in decision-making such as the now predicable protests by social movements against international trade and financial developments at the various global summits. The pressure from individuals and groups within civil society has shifted the power that traditionally resided in formal government structures, to more democratic and participatory forms of governance. These developments do not signal the end of the State, as some have argued, however, but rather a change in the ways in which the State organises and mobilises interests. Within the information and communication sector too, the world has not witnessed deregulation as is often contended, but rather changes to the ways in which markets are organised and managed. In fact, the markets often cited as the most liberalised, or deregulated, are in fact among the most managed and show some of the greatest levels of regulatory intervention.

These shifts reflect a broader movement from formal and vertical systems of government, concerned with command and conformity, to more horizontal systems of governance more suited to engaging with a network economy. Governance implies interaction with partners so that policy formulation and regulation becomes part of a joint effort, which takes place in the public sphere. Governance, as distinct from Government, can be described as,

the process through which institutional, business and citizen's groups articulate their interests, exercise their rights and obligations, allocate choices and opportunities and mediate their differences... It hinges on equal partnerships, collective wisdom, co-operation and responsible action on the part of all actors in governance (the public sector, the private sector, academia and the media). It relates to the rule of law, accountable administration, legitimate power, responsive relation and is defined as effective participatory transparent and equitable. [\(2\)](#)

The examination of the institutional arrangement which follows can be understood in the context of the struggle by Government to transform decision-making and institutional arrangements. This shift from formal systems of government, by dicta and administrative fiat, to more modern and appropriate systems of governance, which focuses on communication and shared resources and outcomes, is plagued by tensions. On the one hand, there are tendencies towards command-type decision-making reflected in both the remnants of the "old guard" in the bureaucracy but which also resonate within the former militaristic structures of the ruling party, the African National Congress. On the other hand, countering

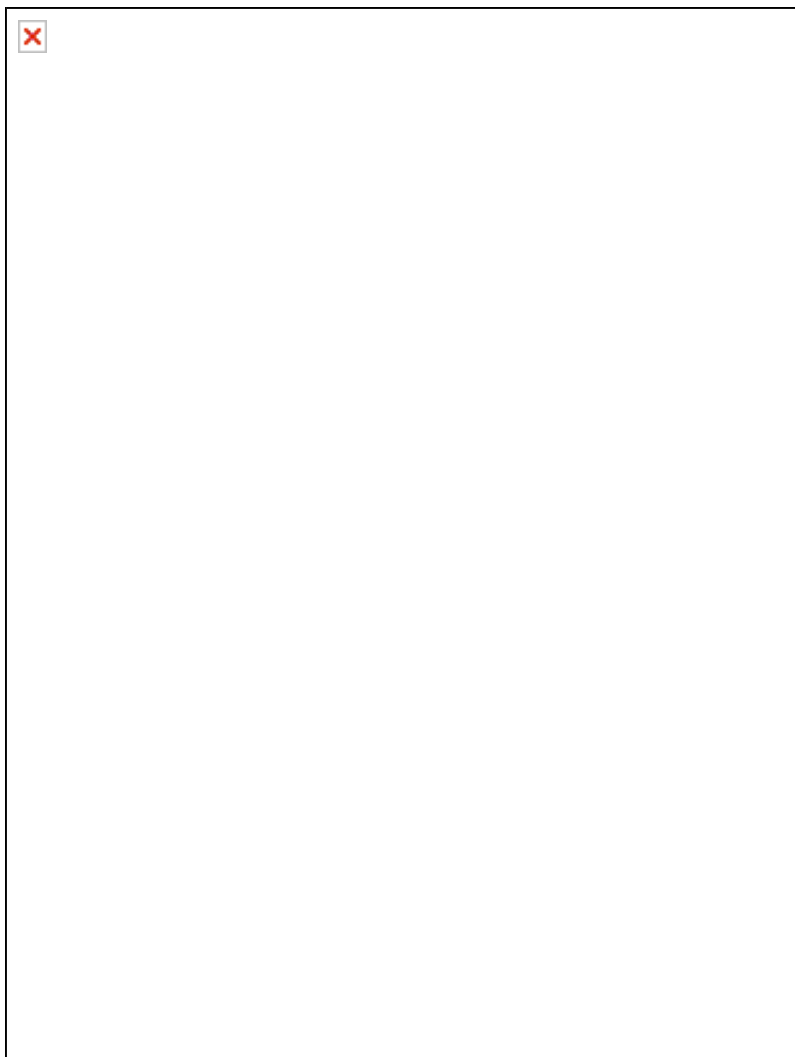
this tendency, are the traditions of participatory democracy that have characterised various civil society responses and particularly the mass democratic movement of the 1980s and early 1990s. These tensions are not clear-cut, consistent or even clearly visible but impact in complex and cross-cutting ways on the policy framework and arising institutional arrangements.

Periodisation

Institutional arrangements in the broadcasting and telecommunications sectors can be periodised into four overlapping phases:

- Pre-transition phase (1991 –1993)
- Reform phase or first policy formulation phase (1993- 1997)
- Implementation phase (1994 – 2000)
- Review phase (1998 – 2001)

Figure 2.1 Periodisation of broadcasting and telecom reform.



Pre- transitional phase

The last decade has seen massive changes to a sector once characterised by inefficient monopoly provision in the case of telecommunications, and in the broadcasting sector by an expensive State propaganda organ. Despite efforts at cocooning and self-sufficiency by the apartheid regime global developments began irrevocably impacting on the information and communication sector in South Africa, as in other parts of the world, by the 1990s. Prior to the corporatisation of Telkom as a separate operating entity, SA Post and Telecommunications held a monopoly in postal and telecommunications services, with telecommunications extensively subsidising postal services. Suffering from a shortage of capital and not run on cost based principles, the telecommunications arm was poorly suited to take on the challenges of a globalising and competitive economy. Although internally the telecommunications operation was perceived as a cutting edge utility, efficiency indicators such as access lines in service per employee measured a relatively low 45 in 1989. In contrast, South Korea measured 226, the US 130, Mexico 95 and Turkey 65 (3). In the early nineties demands on the Nationalist government from large users for improved services, together with the availability of new technologies which undermined the natural monopoly argument persuaded it to open up telecommunications. The process began with corporatisation of Telkom SA in 1991, which opened up the issue of privatisation.

Despite the State being the sole shareholder, it nevertheless resulted in institutional restructuring including a new board with, for the first time, limited black representation and devolution of centralised powers to regional operations. The rationale for the privatisation of the sector was probably twofold. Firstly the De Villiers report commissioned by the Government to assess the state of Telkom, presented it as a debt-ridden bureaucracy that could be beneficially got rid of. It is also not unlikely that the State wished to ensure that such state assets, which might be rehabilitated through privatisation, did not fall into the hands of the new government. This politicised the privatisation question for various actors standing in the wings, including the ANC and trade union federation, COSATU.

In 1990 the ANC had been unbanned and a multiparty negotiation forum, Convention for a Democratic South Africa (CODESA), was established to negotiate key policy issues. A combined telecommunications, broadcasting and spectrum regulator was proposed but the collapse of CODESA in 1992 brought negotiations to an end. In the meantime another report by Coopers and Lybrand, which had been commissioned by the Government to investigate the state and future prospects of the sector, was delivered to Government. It concluded that Telkom should have no regulatory functions and government's role as policy-maker should be separated from its role as shareholder of the monopoly, which could report to the Department of Finance. This significant proposal never reached fruition. Many argue that this arrangement would have dealt with the conflict of interests the Minister of Communication currently experiences as the majority shareholder of the monopoly incumbent and as the governing party responsible for the creation of policy. It also proposed a statutory consultative committee made up of sector stakeholders and an independent regulatory agency.

However, the multi-party negotiations were preoccupied with broadcasting and many in the Alliance of the ANC, the South African Communist Party and COSATU were reticent about dealing with telecommunications, because of the lack of understanding of the technical and economic issues. Within in the longer term the report argued for an exclusive period of five years in exchange for network expansion targets. Despite the vociferous opposition to the report from the Alliance, Robert Horwitz points out that the report framed the terms of the debate between the Alliance and National Party on the future of telecommunications in South Africa (4). However, it was only after 1994 that the State under the African National Congress government intervened to partially privatise it and deregulate the market.

It was in fact broadcasting that had led the way, by breaking the state monopoly back in the 1980s. The introduction of technological applications made possible the introduction of subscription

broadcasting services. In the politically strained 1980s, these services could be narrowly provisioned to provide relief to the voting public from the realities of guerilla warfare and other disturbing evidence of social and political dysfunction. It could provide, together with a web of media, education and cultural threads, the appearances of normality, and even technological and economic progress, to a country, which had lived so long under a series of states of emergency that they had become the norm. It provided the State's hegemonic partners, in the form of newspaper owners, with a valuable new source of revenue, the advertising base of which they claimed had been eroded with the introduction of television in 1976.

At the same time resistance media burgeoned in short-lived new metropolitan titles, community freesheets, and illegal radio stations. In 1993 the Department of Home Affairs was sitting on 80-90 applications for broadcast licences but refused to deal with these while awaiting the broadcasting regulator [\(5\)](#).

The final unilateral act of the outgoing government in this sector was the issuing of the two cellular licences. These were pushed through by the then Postmaster General in 1993, allowing Telkom a share in one of the licences, Vodacom and Transtel, the transportation parastatal's communications arm, a smaller share in other new operator, MTN.

Broadcasting Reform phase

Broadcasting

Following a deadlock in the multiparty negotiating forum over telecommunications, which had originally been coupled to the broadcasting dispensation, in a remarkable act of foresight or coincidence -- conflicting parties finally came to agreement on broadcasting. The Independent Broadcasting Act was passed in 1993 and came into operation in 1994 following the first democratic elections.

The Independent Broadcasting Authority, unlike the telecommunications authority, came into operation without a clear policy process emanating from government, which was at that time merely an interim political arrangement, the Transitional Executive Council. The Act, which brought it into being, was the product of a negotiated settlement and negotiators preoccupied with ensuring free and fair elections in the future. The context for this particular institutional arrangement is often cited as a weakness and certainly provided the basis for the Government to introduce the Broadcasting Act in 1999. Another view might be that it was the product of a golden moment in history. Effectively no one was in power and all parties objectives were concerned with safeguarding their rights and curtailing those of a government of which no one was guaranteed of being part at that time.

The validity of such a view might be reflected in the independence of the Authority and its protection under the Constitution -- in contrast to the telecom regulator which followed. The Act sought to provide for the regulation of broadcasting activities in the public interest and

... to function wholly independent of the state, governmental and party political influences and free from political or other bias or interference; to provide for the representation of that Authority by and its functioning through a council, and to define the powers, functions and duties of the Authority; to provide for the devolution of power relating to the administration, management, planning and use of the broadcasting services frequency bands to the said Authority... [\(6\)](#)

The public interest objectives captured in the Act can be clustered as followed:

- promotion of diversity in programming which should cater for all languages and cultures and geographic regions;
- promotion of public, private and community broadcasting while protecting the integrity and viability of public broadcasting;
- ensure fair competition among broadcast licensees while refraining from undue interference in commercial activities of licensees;
- ensure that broadcasting services are controlled by a diverse range of communities in South Africa and particularly that broadcast services are owned by historically disadvantaged individuals;
- encourage investment in the broadcasting industry but ensure that services are not controlled by foreign persons; and
- efficient use of broadcasting services frequency bands and compliance with internationally accepted technical standards.

Institutional arrangements

The Act required that the Council be appointed along the following principles:

- a public nomination process;
- transparency and openness;
- appointment by the president on the advice of the National Assembly against the specified criteria.

These included that when viewed collectively the Councillors:

- have their qualifications, expertise and experience in the field of policy, technology, law, frequency planning, business practice and finance, marketing, journalism, entertainment and education.
- are committed to fairness, freedom of expression, the right of the public to be informed and openness of accountability of public office.
- represent a cross section of the population of South Africa.

The Council members had full-time staggered appointments for the purposes of continuity. Although the Act enabled the Council to appoint a CEO and staff, there was almost no regulatory experience in the country. The former licensing agency, the Department of Home Affairs provided a licensing officer and a secretary. In response to this, the Council took on the management functions in order to get the organisation operative. However, having become hands-on it was difficult for the Council to relinquish the day-to-day management of the Authority. Another concern raised with permanent members is that is likely that they become involved in the preparation of rulings and decisions that they later adjudicate. This leaves no appeal other than to the courts.

In a political compromise reflective of the time, co-chairpersons were appointed. Although these particular individuals worked closely together, it was potentially divisive as staff and industry lobbied one or the other.

Telecommunications

Having been abandoned at the multiparty negotiating forum, telecommunications, as a major state asset, came to the fore on the national agenda of the new Government. The use of ICTs for development was on the political agenda of the ANC even before 1994. The Reconstruction and Development Programme, which formed the manifesto of the ANC for the elections, included cross-cutting sections on information and communication technology. The RDP Base document, which was initially the policy blueprint for government, identified affordable access to communications services as a basic need to be targeted. It is further argued that upgrading the information infrastructure could facilitate an upgrading of education, health care, recreation and other services.

Despite the broadness of these statements, at that time what was clear was that the basic network should remain public, and that any privatisation undertaken by the old regime would be reversed. In line with what was becoming widely perceived as "best practice" in the nineties the RDP also proposed a separation of policy, regulation and implementation and the establishment of an independent regulator. Reference is also made to value-added services provision by the private sector. Towards achieving these ends the new Department of Posts and Telecommunications, under the Ministerial leadership of ANC intellectual Pallo Jordan, and later former trade unionist Jay Naidoo, began an extensive process of consultation which produced a green and white paper and ultimately the Telecommunications Act of 1996 (7).

The White Paper, which describes government policy, was as a result widely accepted by stakeholders whose views had been painstakingly included into a broad consensus. Horwitz (8) points out that while the policy grew organically from the South African context, many of its principles drew on international experience and included:

- Commercialisation and separation of the state operator (South Korea);
- Concentration of the provision of universal access and service by a time bound monopoly over the basic network;
- A liberalization timetable (Peru);
- Injection of new capital and expertise through a strategic investor, while retaining dominant ownership by the state (Mexico);
- Reserving a percentage of ownership shares for labour and previously disadvantaged groups;
- Licensing other operators and establishing network rollout expectations (Mexico);
- Establishment of a universal service fund to create a more transparent mechanism to expand the network to unprofitable areas (Europe).

The process drew on the strongest traditions of participatory democracy and created a, "terrain of stakeholder politics distinct from party politics per se and inter corporate bargaining" (9) characteristic of such policy formulation processes. As the process moved from the White Paper through 14 drafts of the legislation, some core principles were, however, undermined and some of the carefully constructed faith in the process eroded. Most significant was the reassertion of the ministerial authority, particularly in relation to core regulatory and licensing functions of the new regulator. Horwitz attributes this to the end of the Government of National Unity in 1996 and the ANC's desire to take over the reigns of power. It also coincided with the shift from the reconstruction and development programme to the GEAR

(Growth Employment and Redistribution) macro economic policy which sought to secure the confidence of international business as a key to economic growth and employment creation.

The regulatory framework created by the Telecommunications Act was intended to smooth the transition from a monopoly market in essential services, to one in which there would be competition among a variety of telecommunications services as envisaged in the White Paper.

The Act identifies this and other policy objectives in general terms in Section 2, including the promotion of universal and affordable telecommunication services that are responsive to the needs of users and consumers among the usual requirements for efficient spectrum usage and adherence to international technical standards.

Institutional structure

These policy objectives underlie the provisions of the Act, which among other things, established the South African Telecommunications Regulatory Authority (SATRA) as an independent body. Drawing strongly on the IBA Act, the SATRA Act established a Council responsible for regulating the telecommunications industry in the public interest. The Act allowed for the appointment by the President, through a public nomination process and on the advice of Parliament, of a council of no more than seven Councillors. Collectively, they are required to have the technical, financial and policy skills to effectively regulate the industry and are committed to fairness, accountability and transparency.

While the policy objectives also guided several of the principal regulatory instruments contemplated under the Act, such as licensing and issuing of regulations, these were not completely separated between the Minister and the regulator. Together with a number of associated ministerial determinations relating to interconnection and tariffs, the Minister issued the Telkom licence, following the sale of 40% of Telkom to SBC and Telecom Malaysia. The regulator is responsible only for the monitoring and enforcement of compliance by Telkom with the conditions of the licence.

The Act provides for the Minister to shape the development of the telecommunications industry at the level of policy, mainly through the issuance of policy directions. Specifically, the Minister was responsible for issuing policy direction relating to the administration of two innovative developmental agencies, the Human Resources Fund and the Universal Service Fund. In the whiteWhite Paper and the earlier draft of the legislation these bodies were to fall within the ambit of the regulator. It was only between the 12th and 14th draft of the legislation that the Department began to claw back powers that had devolved upon the regulator in the policy process. The motivation for this was understood to be the need of the government to control and manage the entry of a strategic equity partner and its ability to deliver on undertaking in terms of the final agreement. The agreement is confidential and the regulator has not even been privy to it.

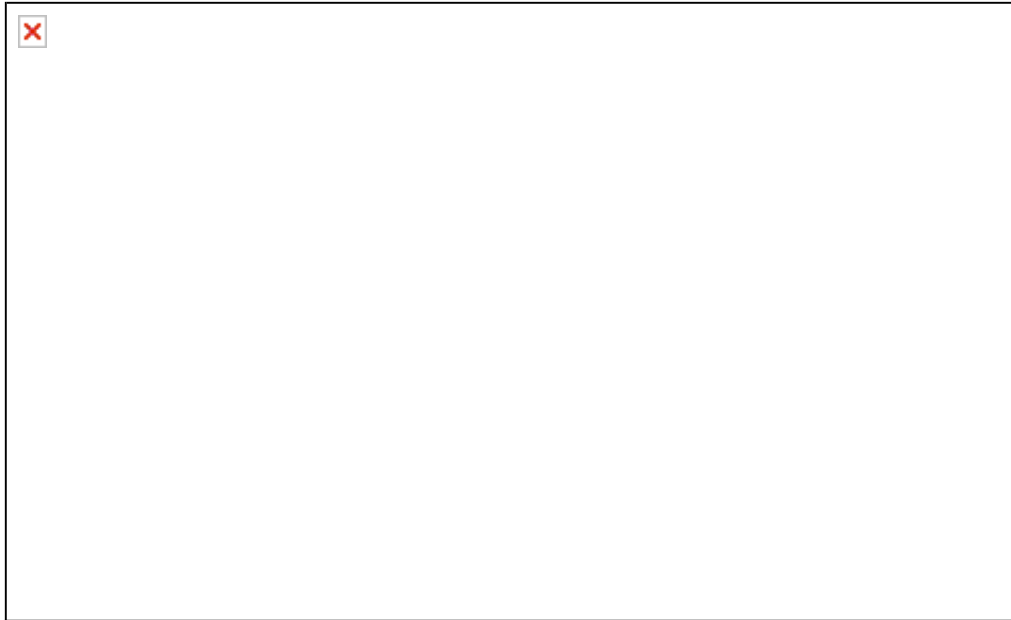
Presumably with the same motivation, the Act also provided the Minister with the right to approve any regulations made by SATRA, which must be viewed as a constraint on its independence. The Minister was also responsible, in terms of the Act, for calling for further cellular licence applications and for granting the licence, which would be issued by SATRA. History now testifies to the messiness of this arrangement. The award by the regulator of the licence to the Saudi backed Cell C consortium and confirmed by the Minister has been held up for two years in a court challenge.

Universal Service Agency

The new government inherited the highest average telephone teledensity (main telephone services per

100 people) in Africa, which in the mid-1990s stood at 10,05 per hundred inhabitants or roughly 3 million households. Besides being low by middle income country standards, it was also very racially skewed. Eighty-nine per cent of white households, 77% of Asian households; 43% of Coloured households and 11% of Black households had a telephone.

The Phone Gap



Source: The South African Telecommunications Regulatory Authority (SATRA) 1998

The Act set up a specialised body the Universal Service Agency whose task was to facilitate the achievement of affordable universal service in South Africa. Acknowledging the prohibitive cost of services for a large portion of the population, it established a Universal Service Fund to subsidise service to needy people.

As Sean O'Siochru concluded at the time the approach developed to the joint challenges of liberalisation and universal access seemed correct. It included:

- policy formulation to reconcile at a high-level the demand of the sector and the various operators and the demands of development and universal service.
- regulation for sectoral growth and liberalisation under a regulatory agency;
- support for universal service and development through a diversity of actions and various inputs into regulatory and policy domains under the Universal Service Agency. [\(10\)](#)

A recent review of the Agency however has concluded that the institutional structure is believed to have been one of the major flaws of the USA, which is widely regarded as having failed to implement its mandate. The Head of the Agency was accountable to the Director General. Having developed no universal service policy other than the roll-out of Telkom during the exclusivity, and a broad reference to the USF funding needy people, the USA rapidly become the direct mechanism for implementing the projects of the Department of Communication rather than an assessor of projects that would be implemented by other players. In that sense it played the role of both the referee and player. The review of the Agency, which was governed by a reviewable sunset clause within five years of coming into

being, has proposed that the Agency continue but that an independent board be established to buffer it from direct political influence and a clearer mandate on its monitoring and research functions.

Broadcasting Implementation phase

Broadcasting

Beside directives to conduct a Triple Inquiry into the viability of the public broadcaster; local content; and cross media control, the Authority found itself in a policy vacuum. This did not just affect peripheral issues but such significant matters as the market structure, including the central issue of the privatisation of the commercial arms of the public radio broadcaster.

In addition, the difficulties of specialist and complex issues such as those in broadcasting and telecommunications being determined by the Parliament as required by the IBA Act, are reflected in the outcomes of the Triple Inquiry Report. After a year of national and regional public hearing the Authority reported to Parliament on its vision for the broadcasting industry. It presented a tightly argued ecological approach to broadcasting with shared opportunities and obligations on all broadcasters.

The television services of the public broadcaster, the South African Broadcasting Corporation, were pared down and a private competitor was proposed. The Authority carefully determined the financial requirements of the restructured public broadcaster and offset these costs against the income from the privatisation of the commercial radio stations of the SABC. As the Parliamentary Portfolio Committee conceded to the demands of the newly legitimate public broadcaster, represented for the first time by prominent members of the struggle for liberation of the country, the carefully interwoven plans of the Authority unravelled. This resulted in a bloated public broadcaster with fewer means than ever to fulfil its mandate, as the revenues of the privatisation of the commercial radio stations, intended by the IBA for the restructuring of the public broadcaster to deliver on its new broad mandate, were not ploughed back into the SABC. Being national assets, the Government decided that all profits were to go to the national fiscus.

With the establishment of an independent regulator in 1994 the communication sector more formally entered the terrain of global economic competition offering a geographically and culturally distinct site for investment. Despite an overwhelming mandate to protect the public broadcaster, the regulator in four years, privatised six of the public broadcasters commercial regional radio stations which are independently owned and licensed 80 community radio stations. In addition six greenfield metropolitan radio stations were licensed in Cape Town, Durban and Johannesburg and a private commercial television station in competition to the three channel public broadcaster.

The South African Broadcasting Corporation (SABC) still dominates the market with three channels and around 12 million viewers a day. The SABC also run 19 radio stations, of which two are national commercial stations, 5FM and Metro FM. The other stations service the 11 official language groups and a number of cultural and regional interests.

The monopoly of the free-to-air television market ended in 1998 with the introduction of a free-to-air competitor to the public broadcaster. E-TV is jointly owned by a local empowerment consortium dominated by trade union investment arm Hosken's and Time Warner and commands around 8 % of audience share [\(11\)](#).

The inability of the Authority to deal with licensing and regulatory matters under the existing legislation drew rapidly to a head with the lodging of applications by interested parties for satellite broadcasting licences. Indicative of the lack of policy and the speed with which the Act had been outstripped by

developments within the sector, the Act failed to provide specifically for satellite broadcasting. While trying to be expansive in the mandate of the Authority, it referred to its responsibility for all terrestrial broadcasting. While some aspirant satellite broadcasters waited futilely for a licensing regime throughout the nineties, the controlling company of the terrestrial subscription broadcaster, MNet, use the lacuna in the legislation and policy to regard itself as exempt from needing to be licensed, and establishing a DTH digital satellite service. With the new broadcasting legislation of 1999, the IBA is required to regulate this area and examine ways of encouraging competition.

Accusations of fraud against some of the Councillors of the Authority, together with the chaotic licensing situation, caused by the limitations within the legislation, provided the State with the opportunity to impose some policy direction on the sector. Following a rather hurried Green and White Paper process, the Broadcasting Act was cobbled together in 1998 and passed by Parliament in 1999. The Broadcasting Act, sought to clarify the relationship of the Minister to the regulator. The whiteWhite Paper justified this in the following way.

The perception that the IBA is not accountable to anyone in its activities regarding the implementation of public policy is wider spread and a source of concern ... While the basic assumption is that there will be an effective regulatory authority capable of basing its activities on public policies, it is nonetheless important that the regulatory authority retains public trust [\(12\)](#).

This second broadcasting policy process bore no resemblance to the consultative process that resulted in the telecommunications legislation two years before and which was the hallmark of good governance. Neither did it have the gleam of that historic moment when no party was effectively in power and policy and law were the product of negotiated consensus. Although the process again drew diverse stakeholders into a consultative process, stakeholders expressed their concern that their viewpoints were being disregarded. They were merely being used to rubber stamp the blueprint of Government. There is little doubt that the sector lacked policy direction and amendment to the legislation was needed. The process however, reflected the tensions within the Government between a stated commitment to the democratic and participatory process and the desire to seize the reins of power and govern, which resonated particularly, but not only, with its more militaristic components.

The broadcasting policy process provided the Government with the opportunity to indicate its broader intentions for the sector. The White Paper recognised the convergence of telecomm broadcasting and computing, and contained an entire chapter on converging services dealing with Internet, satellite, digital radio and television broadcasting and indicating the need for a converged regulator. However, the legislation is flawed and contradictory and the Regulator has declared itself unable to licence without amendment to it.

Telecommunications

In May 1997, the Minister granted Telkom three licences, each with a term of 25 years. Of the three, the PSTN licence is the only one with exclusivity provisions. Telkom has argued that the radio licence provides them with exclusivity over certain bands in order to offer PSTS services, particularly wireless local loop. However, the radio licence clearly facilitates the use of radio frequencies and stations necessary to provide the services contemplated in the PSTS licence, the radio licences itself does not provide exclusive rights to spectrum. The PSTS licence gives Telkom the right to provide public switched telecommunications services. Telkom has the exclusive right to provide local, domestic long distance and international services for five years, with an option if it met all its rollout obligations to extend the exclusivity to a sixth year. In exchange Telkom was required to double the network within five years to nearly six million lines. Failures to do so would result in monetary penalties. The licence

identified priority customers such as schools, clinic and libraries and sought to ensure that all villages were connected. However, conditions that would make these feasible to enforce and monitor were often lacking.

In a sound, but in retrospect flawed, attempt to shift the burden of regulation onto the operator, the incumbent was left to its own discretion on a number of issues, including items such as the identification of underserved areas. The licence also makes no provision for a time period that new customers should remain on the network for it to be counted toward the roll out before churning, predominantly because they are unable to afford the service. The then Minister, Jay Naidoo, also issued policy directions relating to tariffs and interconnection. The then Department of Post and Telecommunications was made responsible for the activities of the Universal Service Agency arising from the legislation and had direct responsibility for the Human Resource Fund.

The difficulty of dual licensing and regulatory jurisdiction during the interregnum of exclusivity period was most evident in the introduction of a third mobile cellular licence to compete with the incumbent duopolists. The Act required the Authority to investigate the feasibility of introducing more licences. The Authority, following the input from a later much contested consultant's report, proposed the introduction of two new licences. This was based less on the economic feasibility of this in local market, than on the belief that during the exclusivity and the restructuring of the incumbent in preparation for competition, it was the only serious opportunity for foreign investment. It also had the potential to take up some of the labour that the monopoly was shedding. This was also understood to be in line with Government thinking. However, following pressure from some of the major investors that two licences would dramatically reduce the attractiveness of the market for potential new entrants, the Minister eventually invited applications for a single new licence only.

While this was perfectly legitimate in terms of the law, it created the beginnings of rift between the regulator and ministry, who were perceived to be more responsive to industry pressures than the advice of their own specialist authority. The Councillors, many of them in an about-face, threw their weight behind either the Ministry or regulator's decision further compounding this tension.

Matters came to a head with accusations that, following extensive public hearings on the applications of the six applicants, the office of the Prime Minister had intervened in the licensing process. This had resulted in the belated selection of Cell C by the Council of SATRA, following the recusal of the Chairperson. At the time of the award to Cell C, a consortium with Saudi interests, South Africa was signing off a multi-million Rands arms deal with the Saudis. While the second in line on points, a consortium with Telia-Telenor, reluctantly accepted the outcome, the consortium who had come third, Nextcom, with probably the strongest local empowerment participation seized the disjuncture between the Government and the chairperson to file an application for review. Following further delays and nearly two years beyond the original schedule for the granting of the licences the Minister went ahead with the granting of the licence to Cell C despite the pending court case. Cell C finally reached a dramatic multimillion out-of-court settlement with Nextcom, minutes before the judge was to have ruled on whether there had been political interference in the licensing process.

This saga is only significant in relation to the structure and nature of the Authority and the ability of those with massive financial interests to exploit differences where they are able. An interesting comparison is made with the IBA, which following the award of the first free-to-air private licences, also faced the same accusations of political interference. These were, however, dealt with between the parties inside of the regulator, avoiding a review. It may well be argued that as one forum was solely responsible for the granting and issuing of the licence, decision-making forums could not be played off against each other.

Universal Service Agency

The central challenge to the regulatory authority during this period was to respond to privatisation and liberalisation and at the same time maintain a clear and unambiguous focus on universal service for social and long-term development. However, the separation of the USA from the regulatory authority in the final drafts of the legislation, in what can only been seen as a reassertion of political control over the body, made it accountable to the director-general rather than a publicly appointed body. The effect of this is that universal service was removed from the heart of regulation. Rather than universal service being mainstreamed into the regulatory decision making of the authority, it was treated as a separate issue, for which another statutory agency was responsible.

Criticism of the USA had been twofold: On the one hand for failing to fulfil its mandated functions of monitoring progress with universal service, advising the Minister and implementing projects that stimulate public awareness of benefits of telecom services to underserved areas; and on the other hand acting beyond them by implementing the setting up of telecentres.

Progress in universal access and service has been mixed in the past few years. When SBC and Telecom Malaysia bought 30% of Telkom in 1997, licence conditions were set for a fast expansion of the fixed line network in exchange for a five-year exclusivity period of Telkom. While the doubling the network in five years was a challenging goal, Telkom has managed to meet its annual targets. However, many of the lines are proving to be an economic burden which has resulted in churn rates of over 50 % in many rural areas (13).

Despite a clear intention in the legislation that the USF be used to subsidise services to needy people, the USA never set up such a mechanism. A study commission by SATRA in 1997 found that around 40% of the population would not be able to afford even the rental for a Telkom line, never mind usage, even if the rollout were to reach them (14). The USA focused its efforts rather on the establishment of telecentres with different ownership models but mostly owned by community organisations.

While some of the telecentres are doing well, most have grave technical, financial and organisational problems. So far, none of the telecentres has proven to be profitable enough to cover the depreciation of equipment, let alone being able to pay back the original investment (15).

In a recent survey the vast majority of telecentres were not financially viable. Perhaps more interestingly, most telecentres regarded themselves as successful (16). A larger impact has been made by 1 500 phoneshops established by the cellphone companies, operating on a more sustainable entrepreneurial model.

In addition the exponential growth of mobile cellular, particularly pre-paid services has fundamentally challenged the rationale for the exclusivity. With universal access now at around 90%, efforts should be focused on reaching the remaining 10% of the population who are without reasonable access. A re-examination of the definition of universal services as basic telephony will also be required. It has been estimated that about 5 000 telecentres would be needed to bring enhanced ICT services within the reach of all communities in South Africa.

Table 2: telestatistics in SA (1998)			
% of households with service or access	All	African	White

All	Universal service	42	18	82
	Universal access	80	74	93
Urban	Universal service	64	32	82
	Universal access	94	93	94
Non-urban	Universal service	9	5	84
	Universal access	59	56	98

*Source: Aki Stavrou & Peter Benjamin, Telecentre 2000
at <http://www.sn.apc.org/commUnity/>*

While the intention of the USA remains admirable, the issues of governance have not been taken care of. The structure of the organisation, the lines of accountability and transparency and its relationship with policy, regulatory and implementation organisations all require clarity.

As a result while the incumbents, fixed and mobile operators, have largely met their targets these have not been co-ordinated or tightly monitored. Firstly, the obligations on the mobile licensees, determined at the time of the issuing of their licences bear no relation to the millions of subscribers now on the network. The identification of underserved areas to be serviced has been left to the operators. The roll out of public phones, phone shops and other initiatives has not been co-ordinated by either by the USA or the regulator. This has resulted in the same operators moving into the same areas on the basis of their business planning, which targets more profitable underserved areas, before moving into the less profitable areas they should be required to. The arrival in areas previously covered by telecentres has also often been met with hostility by telecentre managers who face subsidised competition from the mobile franchisees in particular.

Some of the proposals to have emerged with regard to the inability of the USA to deliver on its mandate include:

- Co-ordination between USA and SATRA.
- Initiatives undertaken need to be integrated with development policy more generally through institutional and administrative linkages and development of an integration strategy.
- Monitoring progress toward the achievement of universal service should be refined to include assessing the impact on different social groups, parameters of economic activity, capacity to use services effectively and the need for new services.
- Directly sponsoring research in order to assess progress to date and identify effective delivery mechanisms.
- Explore innovation through examining new technological opportunities to develop or attach solutions, test and diffuse them.
- Initiatives beyond telecommunications that contribute to development of information society.
- Create a mechanism for transparency, accountability and participation that the regulator may not

be able to provide owing to requirements around confidentiality and administrative procedure (17).

Prompted by the sunset clause in the legislation requiring a review of the need for a dedicated agency for universal service, a public process was undertaken by the Department of Communication with the assistance of a diverse range of stakeholders. Two main lines of argument developed. The one was that the USA remains as a separate agency but that lines of accountability and transparency be improved, with the establishment of a board to cushion it from direct political influence. The other was that the sunset clause, which will come into play in 2002, should trigger the incorporation of the USA into the newly converged broadcasting and telecommunications regulator, as a special unit with dedicated funding.

The new regulator itself, straining under the realities of a greater mandate, together with a mammoth dearth of both financial and specialised human capital, is not particularly keen to have any further responsibilities. The latest set of policy directives from the Minister has decided in favour of the retention of the Universal Service Agency, with the incorporation of a board in its structure, who will be responsible for overseeing the evaluation and monitoring of universal access and service schemes to be facilitated by the body. Time will tell if the best institutional arrangement have been overruled by political imperatives. Certainly the establishment of the board provides a political buffer between the agency and the Department of Communication.

Review phase

Despite grave logical inconsistencies in the Broadcasting Act of 1999 the Act acknowledged a need. This was for legislation that enabled regulation that went beyond traditional television and radio, to encourage the kind of investment needed to run large regional and globally competitive multimedia operations and which would grow and export national cultural products.

In further acknowledgement of the realities of convergence between the broadcasting and telecommunications sectors theirto meet her own needs in the global information economy, the regulators were merged into the Independent Communications Authority of South Africa (ICASA) by act of Parliament, in 2000. The need for their coherent regulation if South Africa was to meet her own needs in the global information economy, was also a consideration.

In addition to the technological drivers, the merger of the Authorities was pushed by a number of other developments. Government attempts to cut spending had already resulted in the slashing of regulatory. The rationalisation of the Authority was seen as an effective way of avoiding duplication of effort and consolidating skills in areas of shortage within a developing country. Areas particularly identified for avoiding duplication were the administrative and technical (18). The Legislation largely deals with the merger of the two decision-making bodies, the Councils, of the two authorities. The actual regulation of broadcasting and telecommunications is still determined by the Broadcasting and IBA Acts and Telecommunications Act respectively. This is seen as an interim measure until such time as a convergence policy and legal framework is introduced.

In the interim, a comprehensive e-commerce law will go before Parliament this year. In compliance with the Broadcasting White Paper, the Minister had appointed a Digital Broadcasting Advisory Body whose recommendations will have to take into account a converging environment.

The Minister has also issued a number of telecommunications policy initiatives in order to deal with the next phase of liberalisation of the telecommunications market. After much deliberation, the proposed introduction of a duopoly in the incumbent public switched telecommunication services market was

replaced with two additional operators, each one of which would include the communications networks of the national electricity provider and the national transportation company. While this has been welcomed as a positive step towards opening up the market, the incentive for investment in these licences is that other value-added service providers and private network operators will not be able to provide voice, VOIP, for another three years. As this is where the innovation in services and applications has historically occurred this has caused some alarm.

Another area of contention has been the policy intention to grant on a non-competitive basis an international telecommunications services licence to the state-owned signal distributor, Sentech. The encroachment of this historically lucrative type of licence on a non-competitive basis, is seen by the incumbent network operators and aspiring licensees as a serious infringement of their exclusive rights as network operators under the new regime. This has also been the rationale for the anxiety around what is meant by the fixed-mobile licences that will be granted to all network operators. While this suggests a forward-looking Government aware of the convergence of fixed and mobile services, the announcement overnight wiped R6billion off the shareprice of MCell, the listed owner of one of the duopoly mobile operators, MTN. Government, with an indirect shareholding in MTN through Transtel, the transport communication network company, has been trying to qualify what this means ever since. However, it is not clear what this will mean from a licensing point of view other than that all network operators will be able to use whatever technology is most appropriate and cost-effective to deliver their services. All these six network operators, three PSTN and three mobile cellular, will also gain automatic access to the contested 1800MHz GSM second-generation spectrum and the Third Generation spectrum.

The ability of the new combined regulator to implement these moving fast-moving policies has been a matter of grave concern within the sector. In interviews with industry, government and the regulator conducted recently, there was widespread agreement that convergence raised new regulatory challenges that required new regulatory frameworks.¹⁹ Some industry stakeholders said this was particularly the case if one believed that the spread of broadband could redefine or reshape the global economy over the coming years. Specifically, the convergence of broadcasting with personal telecom, required urgent regulatory attention.

While most respondents believed it was necessary to merge regulatory structures in order to ensure balance in the regulation of converged technologies within the telecom sector there is still a strong belief that infrastructure or carriage regulation should be treated quite distinctly from content regulation. This is one of the most controversial areas of regulation in the newly converged areas of broadcasting, telecommunication and IT. Traditionally telecommunications operators and regulators have not had to concern themselves with the cultural and political area of content regulation, which has been left to broadcasting regulators. Those coming from the historically unregulated area of IT generally struggle with both infrastructure and services regulation, as well as content regulation.

Most interviewees agreed that the convergence of regulatory structures in order to deal effectively with a converging communication environment was inevitable. Many argued that the regulation of these traditionally distinct sectors would need to be more evolutionary and develop in response to new issues as they came before the authority.

The levels of co-ordination and integration required for broadband services to operate effectively certainly had required a rethink of the historical separation of broadcasting and telecommunications regulatory structures. Perhaps more important and more challenging than the physical integration of these historically distinct agencies, however, is the philosophical integration into an new regulatory approach that is much more encompassing than the sum of the two. Effective regulation in the era of convergence will require greater flexibility and imagination than ever before if the benefits of the new technologies are to be equitable, but innovation and investment not stifled.

Most respondents agreed that the trend towards merged regulators made sense from an efficiency standpoint. However, it was vital to ensure that within the merged entity there exists a sufficient body of operational expertise for all relevant service types. Often the regulator would need to resolve conflicting demands on resources by different service types, and it was critical that the merged entity was not seen to be favouring one service type above another.

Anders Henten identifies some of the problems associated with merging regulators that come from incompatible or "old" paradigms. Examples cited include:

- Infrastructure regulation associated with the telecommunication sector is usually based on the premise of some scarce or limited natural resources which are in public trust, and which have a value attached. This basis becomes less true once broadband technologies are widely penetrated and bandwidth becomes far less of a scarce commodity.
- Content regulation is usually based on protection of certain values, protection of democracy, protection of minors, and the wish to promote local culture or content industry. This is no less true in a broadband world, but content regulation on a medium like the worldwide Web becomes far more difficult to apply, and is much more influenced by voluntary codes of conduct and consumer pressure groups.
- Cross-media ownership regulation has been based on trying to ensure that no individual amasses an overwhelming media ownership such as to exercise undue influence upon the populace. In the Web world, this function tends to be taken over by anti-trust regulation.
- Service regulation is usually targeted at ensuring equal and universal access to certain services regarded as basic. Access remains an important issue in broadband, in ensuring that no infrastructure owner (such as an incumbent telco or a "last-mile-service-provider") is able to exclude access by the customer to other service providers.

In contrast, the world of broadband, with its borderless nature, raises a whole host of new priority issues that may be far more relevant to address. Some of these are:

- the tracing and combating of cybercrime in all its forms (hacking, virus propagation, denial of service attacks, credit card fraud, etc);
- commercial issues around e-commerce, such as non-repudiation of a transaction, dispute resolution, jurisdiction rules, taxation, authentication, electronic signatures, etc [\(19\)](#).

It is doubtful whether these issues would be, or should be, addressed by telecomms regulators, as they fall into normal commercial, trade and criminal justice areas.

Conclusions

These experiments with the institutional frameworks for the policy and regulation of the information and communication sectors have undoubtedly been attempted to deal with both South Africa's national transformation, and the relentless economic and technical changes to the sector being driven at a global level. They have occurred, however, at some national cost and with a level of political expediency. While this is neither unusual nor a particularly African condition, acknowledging it is important.

While the changes have been prompted by a need to modernise the sector as a developmental imperative, make it globally competitive and provide a catalyst to the rejuvenation of the African

continent, the timing has often had a political motivation. The IBA had long been seen as a product of negotiated settlement, unaccountable to the government of the day, the legitimate representatives of people. It had also become a political embarrassment following the misuse of credit cards and poor financial accounting. This provided those concerned by the Authority's lack of accountability to rein it in, by putting in place such stringent budgetary restraints that the regulator in its dying days did not have sufficient funds to fulfil its licensing mandate.

The relationship between the first telecom regulator and the Government seemed better managed, but the lack of clarity and subsequently divergent views of the role of the regulator, came to a head over the licensing of the third cellular operator. Framed within accusations and counter-accusations of corruption and interference in decision-making, the impact on the industry and the economy was extremely destructive. The licensing process was delayed, costing investors millions of rands, as they awaited an outcome. Disgruntled aspirant licensees were able to exploit the breakdown of relations between the government and the regulator to tie that matter up in court. This prevented the introduction of further competition to increasingly dominant mobile operators, the major injection of capital into the economy, the anticipated take up of redundant telecom employees, and, most importantly, a crisis of legitimacy for the regulator. The embarrassment this caused to government was dealt with by dissolving the existing regulators and merging them in an act of perceived modernity and vision, into a regulator better suited to the converging environment South Africa found itself in.

Perhaps one of the most critical factors to undermine the various regulatory institutions has been the lack of resources. The lack of skilled human capital has allowed all three regulators to be out-regulated by the industry and the lack of financial capital has rendered them ineffectual both in defending their actions and fulfilling their mandate. Resource deficit has taken its toll on the ability of the regulator to be effective and reflects the covert desire of the industry and the State for them not to be entirely effective. The industry, contributing over half a billion rand to the national fiscus annually in licence fees, seldom demanded that their fees be used to enable the regulator to be more effective. The State on the other hand, has steadily whittled away the budget and discretion of the regulators in acts apparently forced on them by the fiscus as part of national strategies to reduce state expenditure.

Accompanying these processes has been an increasing shift to "form" of good governance rather than its substance. Public policy processes have lacked the original commitment to participation and consultation that the earlier processes witnessed. Although the motions have been gone through, concern has increasingly been expressed over the lack of influence such consultations have in terms of the outcomes of the policy processes. Recent dramatic shifts in the telecommunications policy were attributed to dissent within government ranks from those believing that greater liberalisation and competition was needed in the sector rather than have resulted from a careful consideration of the submissions of stakeholders. Whether this is the case or not, the shifts in the policy show sufficient deviation from Government's original intentions for the various incumbents and other insiders to have threatened a withdrawal of their existing and future investments.

The Government cannot be held ransom to these threats. While the Government is obliged to protect state assets and respect the interest of existing licensees it is critical that it takes a longer term policy view on the public interest needs of the country. This is essential if it is to position this strategic sector to grow the economy and develop the country and its people.

More generally, until there is an integrated and holistic national information and communication policy, driven from the Presidents Office, various policy proposals impacting on ICT development in the country emanating from different portfolios will continue to be contradictory, inconsistent and ultimately damaging to the vision of South Africa as a regional ICT hub and a major contributor to the African Renaissance.

Endnotes

- 1 See Drahos, P and Joseph, R (1995) Telecommunications Policy, vol. 19 no. 3 pp 619-635.
- 2 Transforming Governance, Background Paper, March 7, 2000, Global Knowledge Z, Kuala Lumpur Malaysia.
- 3 Coopers and Lybrand quoted by Horwitz, R: South African Telecommunications: History and Prospects (1996) at <http://www.vii.org/papers/horwitz2.htm>.
- 4 Horwitz (1996) Section 4.1.2
- 5 Horwitz (1996) Section 3.
- 6 Independent Broadcasting Authority Act 153 of 1993.
- 7 James, N et al. ICT Policy Handbook, 2001, IDRC, Johannesburg (forthcoming).
- 8 Horwitz, R South African Telecommunications Reform in Perspective, Africa Telecom 97, Johannesburg.
- 9 Ibid.
- 10 Sean O Siochru, 1996, Telecommunication and Universal Service in South Africa, IDRC. He makes this point in relation to the USA but it seems most pertinent to the overarching regulatory body, SATRA.
- 11 2000 SAAF First quarter.
- 12 South African White Paper on Broadcasting, 1998: 17.
- 13 Benjamin, P and Stavrou A, Telecentre 2000, at www.community.sn.ap.za
- 14 Stavrou, A and Mkize, K Needy People Study, 1997 commissioned by SATRA, Johannesburg.
- 15 Benjamin P: Telecom Policy 24 (200) book reviews pp. 175 – 178.
- 16 Benjamin, P: IDRC study on Telecentres in South Africa 2001, currently underway.
- 17 CommUnity list serve.
- 18 A table of advantages and disadvantages of Multi-sector regulators is identified in Intven, H (2000) Telecommunications Handbook, infoDev and McCarthy Tetrault, World Bank, Washington.
- 19 Henten, A. 193 – 201.

References

Benjamin, P, Telecom Policy 24 (2000) book reviews pp. 175 – 178.

Benjamin, P & Stavrou, A, 2000. Telecentre 2000, at http://www.communitysa.org.za/docs2/t2000_synth.doc

Drahos, P. & Joseph, R. 1995). *Telecommunications Policy*, vol. 19 no. 3 pp 619-635.

Henten, A. 2000. Regulation in a liberal, international and converging Communication Market, in Cammaerts, B. & Burgelman, J.C. *Beyond Competition: Broadening the scope of Telecommunications policy*, VUB University Press, Brussels.

Horwitz, R. 1996. South African Telecommunications: History and Prospects at <http://www.vii.org/papers/horwitz2.htm>.

Horwitz, R. 1997. *South African Telecommunications Reform in Perspective*, Africa Telecom 97, Johannesburg.

Intven, H. 2000. Telecommunications Handbook, infoDev and McCarthy Tétrault, World Bank, Washington.

James T, Butcher N, Gillwald A and Van Audenhove L et al. ICT Policy Handbook, 2001, IDRC, Johannesburg (forthcoming).

Global Knowledge 2 (2000) Transforming Governance, Background Paper, March 7, 2000, Kuala Lumpur, Malaysia

Melody, W. 1997. *Telecom Reform*, Technical University Denmark, Lyngby.

Stavrou, A. & Mkize, K. Needy People Study, 1997 commissioned by SATRA, Johannesburg.

2000 SAAF. First quarter.

O'Siochru, 1996,S.1996., Telecommunication and Universal Service in South Africa, IDRC.

South African White Paper on Broadcasting, 1998.

South African White Paper on Telecommunications 1996.
