

# **Towards an Integrated Information Society Policy in South Africa**

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An overview of Political Rhetoric and Policy  
Initiatives 1994 – 2000

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## Preface

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The Surveys, Analyses, Modelling and Mapping (SAMM) Research Programme of the Human Sciences Research Council (HSRC) publishes an Occasional Paper series which is designed to offer timely contributions to debates, disseminate research findings and otherwise engage with the broader research community. Authors invite comments and suggestions from readers.

## About the Author

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Leo Van Audenhove holds a Master's Degree in Communication Science from the Free University, Brussels (VUB), and in 2002 he obtained a PhD in the Social Sciences. His thesis was entitled *The Information Society Policy of the South African Government between 1993 and 1999*. Since 1994, he has worked as a researcher for Studies on Media, Information and Telecommunication (SMIT) at VUB, <http://smit.vub.ac.be/>. In the framework of a research partnership between SMIT and TNO-STB in Delft, the Netherlands, he currently also works as advisor/researcher at TNO-STB, <http://www.stb.tno.nl/>. Since 2002, he has been guest professor of International Communications and Information Technology at VUB. His main areas of interest are Information Communication Technologies (ICTs) and development, the information society and, more recently, ICTs in relation to transnational civil society.

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## **An Overview of Political Rhetoric and Policy Initiatives 1994 – 2000**

### **Introduction**

The information society, as a concept for post-industrial society as well as a framework for organising growth and prosperity, has become part of the public and political debate in many countries. Since the beginning of the 1990s, the concept has become widely used in popular conversation, the mass media, political discourse and academic debate, with many different meanings. The term has quickly moved up the political and policy agendas of western and developing countries, as it is believed to bring economic growth and social prosperity for all.

South Africa is no exception to the rule. Even before its rise to power, the African National Congress (ANC) discussed the importance of telecommunications and information and communication technologies (ICTs) in its Reconstruction and Development Programme (RDP), the election manifesto that was to serve as a blueprint for policy once the ANC Alliance came to power (ANC, 1994). After the elections, the new government started to reformulate overall policy frameworks,

some of which touched upon the issue of ICTs. By 1995, the theme of the information society started to surface regularly in political discourse and policy documents. ICTs and access to ICTs started to have prominence both in policy formulation and implementation. Although there was much talk during 1996 and the beginning of 1997 about a Green Paper/White Paper process on the information society, such a policy process never materialised. To date there is no document defining the government's view of the information society, no policy document outlining an integrated strategy to arrive there and no government department officially responsible for the co-ordination of policy initiatives.

This paper sets out to analyse the notion of the information society in South Africa. In the first section we look at the information society as political discourse. In other words, what politicians say the information society is all about and South Africa's role in the information society. In the second section we analyse the broad evolution of South Africa's information society policy.

## **South Africa's vision of the information society**

The absence of a formal vision of the information society in the form of an integrated policy or policy document and the analysis of the political discourse, pose a number of methodological problems in reconstructing South Africa's vision of the information society. The fragmented nature of references to the information society in the form of speeches, policy debate and policy documents, makes it difficult to assess their centrality within actual policy and policy implementation. For example, what is the significance of a speech by Dr Ivy Matsepe-Casaburri (the current Minister of Post, Broadcasting and Telecommunication) about the information society? Should one regard it as simply a sign of the times or as an intentional policy statement?

By trying to construct a vision on the basis of fragmented political discourse and political statements, one risks creating a vision that is more comprehensive than the underlying reality. Notwithstanding these reservations, there is an argument to be made for the construction of such a vision. Over the years, the theme of the information society has been treated regularly not only by the ministers directly responsible for related policy such as telecommunications policy, namely Pallo Jordan, Jay Naidoo and Dr Ivy Matsepe-Casaburri, but also by key figures such as Presidents Nelson Mandela and Thabo Mbeki. We contend that, taken together, these speeches and documents have resulted in a fairly comprehensive view of the information society and of information society policy.

**Political discourse and the information society** The theme of the information society surfaced regularly in political discourse in 1995. It was evident in (then Deputy President) Thabo Mbeki's speech at the G7 Conference on the Information Society in Brussels and in (then President) Nelson Mandela's speech at the opening of the International Telecommunications Union's (ITU) Telecom 1995 Conference in Geneva (Mbeki, 1995; Mandela, 1995). From then on, terms such as *information age*, *information economy*, *information revolution*, *global information society*, and *the age of global knowledge* occur frequently in texts and speeches. As a preliminary remark, it is interesting to note that Nelson Mandela and President Thabo Mbeki seldom use the notion of the information society, preferring the use of the notion of the information age or information revolution. In general, speeches by Jay Naidoo, as Minister of Posts, Broadcasting and Telecommunications between 1996 and 1999, tend to be characterised by the kind of hype typical of the dominant view of the information society as advanced by the western world and its affiliated international organisations (Van Audenhove, Burgelman, Nulens, & Cammaerts, 1999, 2001). Naidoo's successor, Dr Ivy Matsepe-Casaburri, who, in general, keeps a

more low-profile attitude, takes a more down-to-earth stance towards the information society.

In general, however, as in the dominant scenario, there seem to be three main and interrelated presuppositions underlying the preoccupation with the information society in South Africa:

- The nascent advent of a global information economy or society;
- The rapid convergence of telecommunications, broadcasting and computing; and
- The possible positive impact on social change and development.

Many accounts of the information society start with statements related to the advent of a global information revolution or society which is expected to have a substantial influence on societies all over the world (Mandela, 1995, 1998; Mbeki, 1995a; Naidoo, 1997, 1998, 1998a). There is a strong belief that 'the global knowledge society is going to have a dramatic impact on how we live, work, play, and organise our lives and societies' (Naidoo, 1997a). Underlying the (r)evolution towards the information society is a shift in the productive structures of our economies, global as well as local, in which information and knowledge are regarded as the prime productive resources (Mbeki, 1995b). In the words of Jay Naidoo (1998b):

We are at the end of the 20th century that has been shaped by the industrial revolution. We are at the brink of the 21st century that will be driven by the information society. Driving the new revolution is telecommunications in all its spheres, be it the Internet, telephones, computers or satellites.

As becomes evident from the last sentence of the quote, and parallel to the dominant scenario, the advent of the information society is often seen as the outcome of, or even equated with, processes of technological convergence. This convergence is identified as the fading of the 'boundaries



between broadcasting, telecommunications, information technology, and multi-media' (Naidoo, 1997a), as a result of the possibilities that arise for each sector to process and exchange information in digital form (Naidoo, 1997b). At the level of the sector itself this evolution poses major challenges for policy makers, regulators, legislators, operators and users (Naidoo, 1997a). At the national and international level:

The convergence of technologies has also begun to affect not only the ways in which markets are structured, but also the alliances of companies in broadcasting, telecommunications and general media services. These developments affect both the infrastructure and the content components of the telecommunications sector which require a multi-sector approach involving related industrial and trade policies (Naidoo, 1997c).

The evolution towards the information society characterised by a shift in the production structures of the world economy and largely based on technological convergence is perceived as providing countries, and more particularly South Africa, with an unprecedented window of opportunity.

This belief is widely shared by South African political leaders. In his memorable speech at the ITU's Telecom 95 Conference, then-President Mandela stated that converging developments in the fields of information and communications offer immense potential to make real progress in the direction of 'eliminating the distinction between information-rich and information-poor countries which is critical to eliminate economic and other inequalities between North and South, and to improve the quality of life for all humanity' (Mandela, 1995). Jay Naidoo even mentions the possibility of skipping or leapfrogging stages of development (Naidoo, 1997d; 1998c).

Underlying this stance is the strong conviction that ICTs can be used as a positive force for social change. In numerous speeches, Jay Naidoo has stressed three main principles, which will also constitute important pillars of South Africa's policy in the field of ICTs and the information society, namely:

- The link between investment in ICTs and socio-economic development, or as Jay Naidoo points out: ‘In the Global Information Society, there is a direct positive correlation between access to telecommunications and socio-economic development. We realise that telecommunications is no longer the consequence of development; rather it is a necessary precondition’ (Naidoo, 1998d; 1997e);
- ICTs can play a catalysing role in the functioning of all economic and social sectors. More specifically, ICTs can speed up, and even be an alternative to, the extension of services in areas such as healthcare, education, agriculture, business and government. As Mbeki stated: ‘we believe that the modern communication technology we are all talking about must help us educate our children, particularly in the rural and other underdeveloped areas of our country, teach our medical workers and parents how to care for babies, train our youth, and eliminate distance and infrastructure imbalances which act as a barrier in providing these social services’ (Mbeki, 1995: 183; see also Matsepe-Casaburri, 1999). Naidoo also believes that ‘the commitment of government to bring electronic health care to remote rural clinics, Internet to schools, and distance learning to those in the hinterland of the country is what creating a better life for all means’ (Naidoo, 1997a); and
- Cutting edge communications technologies are a precondition for competitiveness in the global economy in that, on the one hand, they enable individuals and firms to access the global marketplace thus enhancing competitiveness and job creation, and that, on the other hand, they are a precondition to attracting foreign investment. Developing countries therefore: ‘need to harvest the information and communication technology to sell our niche products, our minefields, our medicinal, environmental, musical and cultural products. Africa can produce innovative appropriate technology around tele-medicine,

tele-learning and integrating rural communities into the information age' (Naidoo, 1997f).

Although South Africa's leaders recognise these potentials, they are aware that they may not materialise automatically. Access to these technologies is one of the preconditions for the actual use and implementation of new technologies and their content. Many commentators have pointed out the enormous disparities between access to ICTs in the West and in the developing world, especially Africa. They have also pointed out the disparities within South Africa between the white, coloured and black populations and between urban and rural areas (Mandela, 1998; Matsepe-Casaburri, 2000; Mbeki, 1995a). Universal access to technology, nationally as well as internationally, is therefore seen as one of the prime goals of South Africa's vision of the information society (Mandela, 1995, 1998; Matsepe-Casaburri, 2000; Mbeki, 1995b; Naidoo, 1997). Over and over again politicians have stressed the necessity of bridging the gap between the information-rich and the information-poor by providing universal service or universal access. The extension of the network is a precondition for the provision of other services to the most marginalised and vulnerable in society (Naidoo, 1997).

As to the content flowing over the information super-highway, South Africa is aware of the enormous imbalances in the flow of information. Access to the content, spreading through multi-media networks, may well have negative impacts on culture as well as development.

What is the content we are putting on our screens or through our infrastructure in terms of our Internet? ... In fact, we have seen a uni-colour world, we are seeing a uni-lingual world, we are seeing a world increasingly dominated by a particular ideology that seeks to preserve the wealth and affluence and privilege of those who are powerful in the world today. So we could be very much grateful to a 21st century dominated by a new form of colonialism, of info-colonialism, which is more debilitating in its destruction of our cultures, of our value systems, of our languages, of our very heritage. (Naidoo, 1998c)

Africa faces a repeat of becoming the dumping ground of not only failed baby products and the cigarette export backyard, but also their cultural products that will make us a poor photocopy of Western values. (Naidoo, 1997d)

The challenge for Africa in general and South Africa in particular is to produce the content that develops its own cultures, its own diversity, its own strengths, to exploit the huge wealth that it has inherited in terms of dance, drama and culture. South Africa sees itself in this respect as a possible forerunner for the rest of the continent in producing and exporting African content (Mbeki, 1995; Naidoo, 1998c, 1998e).

Apart from presuming the advent of the information society, some of the more interesting accounts of the information society link the information revolution to broader processes of political and economical globalisation. Thabo Mbeki, *de facto* responsible for much of South Africa's macroeconomic policy, often links the information revolution with economic development in a new global economy in which information and knowledge are increasingly recognised as a valuable resource (Mbeki, 1995b). Apart from the hype, and especially when faced with an international audience, accounts of the global information society or of globalisation itself are more critical. In a speech to the Twelfth Summit Meeting of Heads of State and Government of the Non-aligned Movement, Mbeki emphasised that the processes of globalisation, liberalisation, deregulation and information society or information superhighway, 'all originate from the developed countries of the North, [and as such] reflect the imperatives of the economies and levels of development of these countries and therefore... serve the purposes of our rich global neighbours' (Mbeki, 1998). Furthermore, processes of globalisation result in the reduction of the sovereignty of states, with the weakest – which are the developing countries – being the biggest losers. However, as Mbeki (1998) points out, economic development can no longer be achieved by opting out of the

world economy: ‘...the process of globalisation, in all its forms, means that our own success as developing countries in terms of the uplifting of our peoples cannot be achieved in conditions of autarky or self-contained development within our national boundaries or regions’.

The same goes for the information society (Naidoo, 1997f). Notwithstanding certain reservations as to the international context in which the information society is evolving, South Africa’s leaders have invariably stressed the importance of joining the information superhighway in order to reap its benefits (Mandela, 1995; Mbeki, 1995; Naidoo, 1997g, 1998, 1998b). In the words of Jay Naidoo (1998d):

The information society is not an impossible dream; neither is it a sophisticated nicety. It is fundamental to the upliftment and the improvement in the quality of life of all the disadvantaged people of the world, to ensure that future generations do not suffer from the same disadvantages and that the principle of equal opportunities prevails.

**Translating the vision** Put rather simply, South Africa’s political leaders share the vision that ICTs can help to overcome some of the legacies of apartheid. ICTs are identified as both facilitators in the restructuring of sectors and as a means to deliver services, such as tele-education, tele-health and tele-government. This is despite the fact that these services are not readily available. However, South Africa’s political leaders seem to be aware that the information society is about much more than infrastructure and services. The information society is about global competitiveness and new forms of economic growth and development. The necessity to integrate telecommunications policy with broader developmental policies was already stressed by President Mandela at his speech to the ITU Telecom 95 Conference (Mandela, 1995).

## Broad trends in information society policy

**Schematic overview of initiatives** Table 1 gives an overview of the most important policy initiatives related to ICTs and the information society. The table is organised according to the areas of Developmental Strategy, Infrastructure, Content and Applications, Skills, and Institutional Capacity. Although it is widely recognised that ICTs may wield social change, policies are all too often reduced to the extension of infrastructure and the development of applications and services. Recent experience with policy and policy implementation shows that information society policy encompasses much more than policies on infrastructure and services alone. With the convergence of ICTs, the formulation and implementation of new policies are starting to cut across existing policy domains such as technology policy, industrial (and trade) policy, telecommunication policy, and media policy (Mansell & Wehn, 1998). Furthermore, as the information society is a learning society, educational policy will have to play an overall underpinning role (Van Audenhove et al. 1999). More and more authors recognise that changes cannot take place without widespread social and institutional changes affecting education, training, the labour market, management structures and the new infrastructure (Freeman & Soete, 1994; Freeman 1995; High-Level Expert Group, 1997; Mansell & Wehn, 1998; Melody, 1997). Information society policy will thus have to encompass and co-ordinate a broad body of different and formerly separated policy areas and frameworks and, most importantly, integrate this policy with broader macroeconomic and developmental policies.

The table shows that, by the end of 2000, information society (IS) policy was rather complex. The different policy processes impacting on, and relating to, the information society come from a wide variety of sectors and different departments are driving the policy processes. We will not elaborate on all these initiatives. In what follows we will concentrate on the broad developments in policy initiatives over time.

*Table 1: The most important policy initiatives related to ICTs and the information society*

<b>Policy documents or initiatives</b>	<b>Description of the programme or part of the programme</b>	<b>Responsible department or institution</b>
<b>Developmental strategy</b> (economy, industry, technology and innovation)		
<i>White Paper on Science &amp; Technology</i> (Nov 1996)	Science and technology policy geared at innovation and growth	Arts, Culture, Science & Technology
Foresight (June 1999)	Prospective study directed at a long-term economic and industrial growth strategy	Arts, Culture, Science & Technology
South African IT Industry Strategy (2000)	Industrial strategy for the IT-sector	Trade and Industry
Growth, Employment and Reconstruction (June 1996)	Neo-liberal policy framework for economic development	Presidential Office and Department of Finance
e-commerce	Overall policy to stimulate and regulate electronic commerce	Communications
<b>Infrastructure</b> (networks and infrastructure)		
<i>Telecommunications Act</i> (Nov 1996)	Establishes a new policy framework for telecommunications	Communications
Telkom	Under the new framework responsible for network extension and universal service	Communications (as major shareholder)
Satra	Responsible for regulating the telecommunications sector	Communications
USA	Responsible for the promotion of universal service and access. <i>De facto</i> responsible for the implementation of telecentres	Communications

*Table 1 continued*

<b>Policy documents or initiatives</b>	<b>Description of the programme or part of the programme</b>	<b>Responsible department or institution</b>
GCIS	Responsible for the implementation of MPCCs and the co-ordination of telecentre initiatives	President
<i>Technology-Enhanced Learning Strategy</i> (May 1997)	Strategy to translate the earlier TELI into concrete initiatives and projects	Education
Centre for Educational Technology and Distance Education (1997)	Centre responsible for policy preparation in respect of distance education and technology in education	Education
Schoolnet SA (Nov 1997)	Infrastructure in the educational sector	Education, Communication, Trade and Industry
State Information Technology Agency	New structure responsible for IT in government. Should lead to a better integration of systems and networks	Public Service and Administration
<b>Content and applications</b>		
<i>Technology-Enhanced Learning Strategy</i> (May 1997)	Strategy to translate the earlier TELI into concrete initiatives and projects	Education
GCIS	Responsible for governmental communication and development communication	President
<i>White Paper on Broadcasting Policy</i> (May 1998)	New policy framework for the audio-visual sector	Communications



Table 1 continued

<b>Policy documents or initiatives</b>	<b>Description of the programme or part of the programme</b>	<b>Responsible department or institution</b>
<i>Broadcasting Act</i> (April 1999)	Legislation reforming the audio-visual sector	Communications
Schoolnet SA (Nov 1997)	ICT applications for the educational sector	Education, Communications, Trade & Industry
<b>Skills</b>		
Education policy in general	Policy relevant in as far as it provides people with the right skills to function in the information society	Education
<i>National Qualifications Framework</i> (from 1996)	Qualifications and certification system for the education system	South African Qualifications Authority
<b>Institutional capacity</b>		
<i>White Paper on Public Service</i> (Nov 1995)	Reforms the old apartheid structures into one public service with one public administration system	Public Service and Administration
Educational and vocational policy in general	Policy relevant in so far as it provides people with broad skills to function in society and in modern institutions and organisations	Education, Labour
<i>Employment Equity Act</i> (Oct 1998)	Sets out the policy framework to support disadvantaged groups in finding employment	Labour

## **From policy formulation to implementation and back again**

When looking at IS policy in South Africa over time, one can identify four distinct periods in the general policy formulation process. Broadly speaking, we can identify a transition period, a transformation period, an implementation period and an evaluation period. We will briefly discuss these periods, their main characteristics and the major events that took place in terms of ICT and IS policy.

The first period is the transition period, which ran from 1989 until the elections of May 1994. During this period the transition from the 40 years of Nationalist Party rule to what ultimately became the Government of National Unity was negotiated. Critical to these discussions were the roles in the future society of broadcasting and telecommunications and their accompanying market structures. Although the negotiations led to a new framework for broadcasting in terms of the Independent Broadcasting Agency (IBA), the negotiations failed to come up with a new telecommunications policy which was badly needed. The apartheid government had introduced substantial changes in the telecommunications regime by commercialising the national operator Telkom in 1991, and by introducing two licences for mobile telecommunications in 1993, without introducing the accompanying legislation and regulatory framework.

The Reconstruction and Development Programme (RDP), that formed the election manifesto of the ANC Alliance in 1994, set out the ANC's ideas on telecommunications and ICTs. The document defined access to telecommunication as a basic need that had to be provided at affordable prices as rapidly as possible. However, telecommunications were perceived to be much more than just a basic need. The telecommunications sector is 'an indispensable backbone for the development of all other socio-economic sectors' (ANC, 1994). According to the document, the upgrading of the information technology infrastructure can 'facilitate an upgrading of education, health-care, recreation and other services, by improving the quality of information available and providing communities throughout

the country with access to expertise and usable data' (ANC, 1994).

The second period is the transformation period, which started after the 1994 elections and ran until the first half of 1997. During this period a large number of policy frameworks were renegotiated and developed within the new democratic dispensation. It is interesting that during this period, policy reformulation in different areas coincided with the mounting interest in ICTs and the information society in general. The issue of the information society surfaced regularly in political discourse from 1995 onwards and started to have an impact on policy formulation processes towards the beginning of 1996. In this respect, the Information Society and Development (ISAD) Conference in May 1996 and the subsequent Helderfontein Conference can be seen as turning points (Berlyn, 1996; NITF, 1996a). These conferences put the issue of the information society squarely on the political agenda of both government departments and civil society.

By the first half of 1997, when a lot of policy formulation processes came to an end, many had integrated ICTs and information society issues into their policy frameworks. The first main policy process relating to ICTs that resulted in a new legislative framework was the policy process on telecommunications. This led to the adoption of the *White Paper on Telecommunications* in March 1996, the *Telecommunications Act* in November 1996 and the licence for Telkom in May 1997 (MPTB, 1994; RSA, 1996; RSA, 1997). The thrust of the legislative framework was in line with international practice in that policy, regulation and operation of telecommunications were separated and an independent regulator, the South African Telecommunications Regulatory Authority (SATRA), was introduced (RSA, 1996).

The first partial integration of ICTs in a wider information policy came with the publication of the *Communications 2000* or *ComTask Report* towards the end of 1996. The *ComTask Report* resulted from an independent commission set up by the

Deputy President to analyse the role and function of government communication, the ownership structures and power relations within the media and their effects on government communication. The recommendations made by *ComTask* were adopted by government and formed the basis of the restructuring of government communications. The document put considerable stress on the importance of ICTs for governmental communications and introduced the concept of multi-purpose community centres (*ComTask*, 1996). The Department of Arts, Culture, Science and Technology with its November 1996 *White Paper on Science and Technology* developed another component of the IS policy. The white paper formed the basis for the introduction of a new National System of Innovation (DACST, 1996). In the educational sector the potential positive use of media and ICTs in education was acknowledged early on. By mid-1996 a specially appointed commission presented its *Technology-Enhanced Learning Investigation* (TELI), which contained a broad set of recommendations and guidelines. The main thread of the document was that ICTs should become part and parcel of the whole educational system (TELI, 1997).

It is interesting how, towards the end of 1996, different policy processes relating to ICTs and telecommunications came to an end. It is noteworthy that all of the previously mentioned documents called for a greater integration of policy initiatives concerning ICTs and information policy. The *White Paper on Science and Technology*, the *ComTask Report*, the *Technology-Enhanced Learning Investigation*, the *White Paper on Telecommunications*, and the different initiatives of the NITF, realised that the existing initiatives were fragmentary and pleaded for a greater level of integration. The NITF ISAD position paper and the *White Paper on Science and Technology* called for a consultative Green Paper-White Paper policy process on the information society. The NITF and the *ComTask Report* proposed that the lead and co-ordination should proceed from the highest level possible, in other words,

from the Cabinet. However, such a process did not materialise. The different departments proceeded with the implementation of their policies and programmes.

The third period can be labelled the implementation period. It ran from mid-1997 until mid-2000. During this period, policies formulated under the transformation period were gradually being implemented, institutions responsible for implementation or regulation were being set up and new policy processes were introduced to refine existing frameworks. Within the telecommunications sector, both the regulator SATRA (South African Telecommunications Regulatory Authority) and the Universal Service Agency (USA) were set up in the beginning of 1997. The regulator was to protect Telkom's exclusivity and at the same time to stimulate the modernisation of the sector. Both the *White Paper on Telecommunications* and the *Telecommunications Act* indicated that the regulator should play a proactive role in terms of social policy and development, by ensuring the extension of the network and the regulation of tariff structures. The USA interpreted its mandate broadly and started with the implementation of telecentres. In 1997 its stated goals were extremely ambitious. The organisation calculated that, to obtain full geographical coverage, South Africa needed 3 000 to 5 000 telecentres. Although realising it could not implement so many telecentres, the organisation set itself the goal of testing different types of telecentres and working towards a sustainable model.

Apart from the institutions set up in the telecommunications sector, two other institutions were established which have particular relevance when talking about IS policy. In May 1998 the new Government Communication and Information System (GCIS) was launched. The GCIS was set up as an institution broadly responsible for governmental communications. Its official function was described as 'playing a co-ordinating, facilitating and strategising role for all of government communication, and to provide cost-effective communication services to all of government' (GCIS, 2000). Important to note is that the GCIS was seen as the central institution to foster the link

between government and the people, more specifically the disadvantaged community. In this sense it was often emphasised that the GCIS should play an important role in terms of developmental communication. The GCIS started to play an important role in the field of ICTs and information provision in 1999. It assumed responsibility for the South African government online portal site. It also initiated research projects to define the population's needs in terms of information. Furthermore, from 2000 onwards, the organisation became responsible for the implementation of some Multi-Purpose Community Centres (MPCCs). The organisation also tried to play a role in the co-ordination of telecentre and MPCC initiatives.

In January 1999 the State Information Technology Agency (SITA) was set up as a first solution to the government's IT problems. This new public company was to provide IT-related services exclusively to the Public Service with guaranteed performance levels.

During the implementation period new programmes were conceptualised to develop the information society. The most important one was info.com 2025 presented by the Department of Communications at the ITU Africa Telecom Conference in May 1998 (DoC, 1998). The info.com programme was conceptualised as a modular approach to the implementation of ICT services and applications. One project or a group of projects formed the components of the programme. The programme itself consisted of five main programme components:

- Policy management and institutional framework;
- Information access infrastructure;
- Government information technology;
- Education and training, and
- Private sector development.

The idea behind the programme was not to take applications to full implementation. Rather, by way of pioneering pilot projects, the programme wanted to showcase the possibilities of ICTs. The private sector or government departments could

take these initiatives further, once their feasibility and applicability had been proved.

Around the time of the presidential elections of June 1999, it became clear that South Africa had serious problems with the implementation of its policy. This was true for all sectors relating to ICTs, but particularly for the telecommunications sector. By 1999 the telecommunications sector faced a general crisis. Although the national operator, Telkom, was proceeding with its rollout, the increasing churn encountered, that is the number of lines disconnected in comparison with the number of new lines connected, indicated that the boundaries of the markets were almost reached. The USA had serious problems in implementing telecentres. The regulator did not succeed in developing a proactive policy geared at the development of the telecommunications sector or more generally directed at universal service in support of social development. On the contrary, almost all regulations and decisions made by the regulator were challenged in court, which had a negative effect on the market's investment climate. The tendering process for a new third licence for mobile telecommunications ran totally into the ground. Ambitious programmes such as info.com 2025, which were to be the driving force of the IS policy, were only partially implemented. The reasons for the problems of implementation are multi-dimensional and difficult to pinpoint. What is certain is that the euphoria of the transformation period made place for doubt by the end of 1999. It led to a questioning of existing policies and implementation structures by mid-2000.

The last period is the evaluation period, which ran from mid-2000 until the present. In this period both policy frameworks and implementation are being evaluated and reviewed, and new policy processes are being instituted. The merger of the regulators for telecommunications (SATRA) and broadcasting (IBA) was the first move to strengthen sound regulation. More recently the Department of Communications introduced new policy formulation processes around

convergence and e-commerce. It is redefining the role of the USA and is preparing new policy in light of the introduction of competition in basic telecommunication.

**From universal service to universal access** Since the publication of the RDP base document in 1994, universal service has been central in the discussions of telecommunication and ICT policy. Although the RDP document was not very clear when it came to the goals of the future telecommunications and ICT policy, the document conceptualised universal service in terms of individual access to basic telephony. In other words, each household in South Africa was to have its own telephone. This conceptualisation of universal service also formed the basis of the discussions during the National Telecommunications Policy Project concerning the restructuring of the telecommunications sector. This was further clarified by the interpretation of universal access in the *White Paper on Telecommunications*. Universal access, that is, access to basic telephony by way of a public telephone or a telephone at the level of the community, was seen as an intermediate goal on the way to genuine universal service (MPTB, 1994).

The same interpretation formed the basis of the legislative framework as stipulated in the *Telecommunications Act of 1996* and Telkom's licence of May 1997 (RSA, 1996; RSA, 1997). This legislative framework, and more specifically the licence, stipulates the goals for the extension of the fixed network. Broadly speaking, a dual strategy was aimed at:

- First, universal access was to be furthered through the installation of a considerable number of public payphones and through the provision of telephones to public institutions such as schools, hospitals and local governments. In addition, all villages with between 500 and 1 000 inhabitants were to be connected to the network.
- Second, the main effort was towards the extension of basic telephony to individual households, with special attention to the disadvantaged communities. The licence



obliged Telkom to install 2,8 million new lines of which 1,67 million were to be in disadvantaged areas. In order to allow Telkom to do so, the national operator obtained an exclusivity period in which it would be shielded from competition for fixed local and international voice communication.

It is important to note that the *Telecommunications Act*, and Telkom's licence, only covered obligations for the national operator. This is important in light of the subsequent developments in the sector. In the absence of a proactive policy on universal service by the regulator, Telkom remained the only operator with serious obligations. Although the mobile network witnessed an explosive growth and equalled the fixed network in terms of subscribers by the end of 1999, its operators MTN and Vodacom have no obligations in terms of universal service, as their already poor obligations in terms of Community Telephone Obligations expired in the middle of 1999. This is all the more strange as, due to the delay in the introduction of the third cellular licence, MTN and Vodacom enjoyed a cosy duopoly, characterised by a lack of competition, resulting in high prices. In the end, this all means that, from a legal perspective, universal service is defined as individual access to basic telecommunications at the level of the household via the fixed network.

Apart from the telecommunications policy process, certain events and processes that took place during 1996 had an important impact on the development of South Africa's vision of the information society. From 13–15 May 1996 South Africa hosted the ISAD Conference, at which the National Information Technology Forum (NITF) presented a position paper (NITF, 1996). Subsequent to the ISAD Conference, a second conference on Empowering Communities on the Information Society was held from 15–17 May at Helderfontein (Berlyn, 1996). At this conference, civil society and government met to discuss the progress towards an information society in South Africa. Both conferences were instrumental in putting the

concept of the telecentre and the Multi-Purpose Community Centre (MPCC) on the political agenda. Both were seen as means to provide information, communication and other services at the level of the community. Although the definitions of telecentres and MPCCs proposed at both conferences differed considerably, they shared the possibility of using such structures to provide communities with broader access to ICT-related services.

The end of 1996 and the beginning of 1997 saw the gradual introduction of the concepts of telecentres and MPCCs into policy documents. The Communications Taskforce took over the concept of MPCCs in its *Communications 2000* report presented to the Deputy President at the end of 1996. The report made broad recommendations for a new policy on governmental communications. In the document the MPCC was seen as a local structure where the population gets access to different services provided by government, civil society and the private sector. ICTs and telecommunications services can be part of the services provided at such centres (ComTask, 1996). The Department of Communications included the telecentres in its info.com 2025 programme. As in the *Communications 2000* report, telecentres were identified as a means to spread ICT services to communities. During the implementation period, several institutions were given a mandate to implement both telecentres and MPCCs. At the beginning of 1997, the Universal Service Agency (USA) had high expectations in terms of telecentre rollout. It foresaw the implementation of 3 000 to 5 000 telecentres to cover the whole nation. The GCIS became responsible for the implementation of 55 broader MPCCs (GCIS, 1999).

These different initiatives opened a new political discussion around the definition of universal service and its appropriateness in light of the changes. However, the discussion did not lead to a redefinition of the concept, nor to the conceptualisation of a new legislative framework in support of telecentre and MPCC initiatives. SATRA, which, as a regulator, could have

introduced supporting regulation, did not seem to be interested in the subject. Nevertheless, it should be noted that the policy on universal service had *de facto* changed through the implementation of telecentres and MPCCs. Whereas in terms of the legislative framework, universal service was conceptualised as individual access to basic telecommunications via the fixed network, the reality in 1997 was that government had shifted towards the implementation of a dual policy. On the one hand, government was still pursuing individual access to basic telecommunications. On the other hand government started, through the implementation of telecentres and MPCCs, to implement universal access to a broader set of ICTs, amongst which was access to the Internet at the community level. What was, and still is, problematic is that the legislative framework does not support the second objective, and that proves to be a serious obstacle in terms of implementation.

**Towards increasing complexity** As already indicated, South Africa has never formulated a formal integrated IS policy. Its IS policy has grown out of the initiatives from different departments who have added components to a broader framework. In this process one can observe a growing extension and complexity in:

- The content of the discussions;
- The number of initiatives;
- The number of actors and stakeholders involved;
- The interrelations of processes; and
- The societal level at which the policy tries to have an impact.

During the transformation period, the number of sectors in which ICT-related and IS-related policies were formulated or reformulated, was rather limited. The National Telecommunications Policy Process leading to the *White Paper*, the *Telecommunications Act* and the licence for Telkom contributed to the broader framework. The ComTask process concerning governmental communications was another major

policy process comprising ICT issues. The policy process around science and technology that led to the *White Paper on Science and Technology* contributed from a macro perspective and the *Technology-Enhanced Learning Investigation* (TELI) provided input from the perspective of ICTs in education. It is striking that, with the possible exception of the issue of science and technology, all policy initiatives are geared to the establishment of sectoral policies. Strictly speaking, the policy processes with an ICT or IS-related component, fell under the responsibility of four departments or authorities: The Department of Communications (DoC), the Department of Arts, Culture, Science and Technology (DACST), the Department of Education (DoE) and the Presidency.

During the implementation period, a broadening of the policy process took place in two ways:

- Firstly, new departments entered the field of ICT and IS policy with important new policy initiatives. The Department of Trade and Industry (DTI) brought its South African IT Industry Strategy (SAITIS) to a close towards 2001. The Department of Public Service and Administration (DPSA) was involved in the IT For Government initiative that was mainly driven by actors outside of government. Departments which were already involved in ICTs drove new initiatives such as the info.com 2025 programme by the DoC, the Foresight exercise by DACST and, towards the end of 1999, the e-commerce debate by the DoC.
- Secondly, apart from the existing institutions, a fair number of new institutions were created with specific responsibilities in terms of implementation or regulation. The most important institutions set up were the South African Regulatory Authority (SATRA) in February 1997, the Universal Service Agency (USA) in March 1997, the Government Communication and Information System (GCIS) in 1998 and the State Information Technology Agency (SITA) in January 1999.

It is remarkable for the implementation period that policy initiatives were becoming more cross-sectoral, falling under the responsibility of multiple departments or were at least dependent upon multiple departments for their implementation. The info.com 2025 programme, conceptualised by the DoC, set out an IS strategy which covered a wide range of fields, including infrastructure, content, industry, commerce, and education. From the start it was obvious that the implementation of the programme would depend on the collaboration of several other departments and institutions. The same can be said for the e-commerce debate, also driven by the DoC. This policy will have repercussions for a whole range of departments. The IT For Government process did not have any impact on IS policy, but it is obvious that an IT policy for government would have an impact on the working of all departments. The Foresight exercise brought certain issues connected to an IS policy to a meta-level, setting out developmental paths South Africa could follow in the future, which will have major impacts on economic, industrial and science and technology policies. To succeed it will have to be carried out by many different departments co-ordinating their efforts towards a single goal.

However, the lack of policy integration and the degree of intertwining processes were made abundantly clear when policy and programmes were implemented. Especially during the implementation period, major programmes and policy initiatives ran into problems of implementation and co-ordination. Although more recent policy processes such as SAITIS, Foresight and the e-commerce debate have tried to involve other departments in the conceptualising stages of the policy process, implementation remains fragmented and co-ordination difficult. Outside the departments that pioneered the processes, other departments seem rather reluctant to buy into the process. Furthermore, although certain initiatives such as info.com, Foresight or SAITIS could function as a broader framework for IS policy, there remains a lack of a unified and central policy vision guiding initiatives in different fields.

## Conclusion

As indicated in this paper, South Africa's vision of the information society starts from the premise that ICTs can help foster social development and economic growth. Although political leaders are aware that the information society is about much more than infrastructure and services, ICTs have remained the focal point of attention since 1994.

In this paper we have described three main trends in policy formulation and implementation:

- Firstly, we identified a trend from policy formulation to policy implementation and back again as the country experienced major problems with the implementation of policy. In general, policy-making in South Africa is generally considered to be innovative and of high quality, but implementation seems to be a major problem.
- Secondly, we perceived a shift from a *de jure* universal service definition seen as individual access to a telephone in the household via the fixed network, to a *de facto* universal service definition perceived as universal access to a broad set of ICT services at the level of the community via telecentre-type structures. The shift, however, means that the new definition of universal access to ICTs is not supported by legislation. The absence of sound institutions, as in the case of the regulator, means that many initiatives contributing to the broader definition, such as telecentres, cannot be supported through sound regulation.
- Thirdly, we identified a tendency towards increasing complexity in the content of the discussion, in the number of initiatives, in the number of actors and stakeholders involved, in the number of sectors involved, in the interrelations of processes and in the societal level at which the policy tries to have an impact. Although more recent initiatives have tried to involve other departments in the conceptualisation stages of the policy process, implementation remains fragmented and co-ordination

remains difficult. Outside the departments which pioneered the processes, other departments seem rather reluctant to buy into the processes.

Considering the growing complexity in policy formulation, the problems with implementation and that, since the end of 1996, many policy documents have called for a better integration of processes, it is strange that South Africa has never worked towards a central policy on the information society from which sectoral policies could derive. It is all the more strange since major politicians share a coherent vision on the essence of the information society and the role of ICTs in development. What seems to be lacking is a central institution, not so much taking the lead, but developing the legitimacy to steer initiatives and co-ordinate policy.

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