

### Sara Gon is a consultant to the Helen Suzman Foundation. Sara was an attorney at Webber Wentzel from 1986 to 2001 and consultant from 2001 to 2004. She co-founded the Johannesburg Philharmonic Orchestra in 2000 and was its managing director from 2003 to 2006. Sara managed Tararam: the Israel/South Africa Culture Fund in 2008 and 2009.

Sara mediated and arbitrated for IMSSA, AFSA and AMSSA, sat on the Independent **Exemptions Appeal** Board of the Metal and **Engineering Industries** Bargaining Council, was Vice-chair of the Gautena Chapter of the SA Society for Labour Law (SASLAW) in 2001, chaired the Advertising Industry Tribunal of the Advertising Standards Authority of SA from 2003 to 2005. Sara has acted as a judge in the Labour Court and sat as an assessor in the Labour Appeal Court.

# The ANC's Communication Policy Discussion Document – Building an Inclusive Society Through Information and Communication Technology

Among the discussion documents the ANC released for discussion at Gallagher Estate and for submission to Mangaung is its Communication Policy Discussion Document – Building an Inclusive Society Through Information and Communication Technology. Unlike many of the other discussion documents that the ANC released in April 2012, which were replete with ideological clichés and short on analysis and proposals, this document is frank in its assessment of ICT in South Africa. However, whether the proposed changes to ICT policy and implementation are achievable and realistic is another question altogether. I have summarised the document in so far as it deals strictly with ICT but not research, broadcasting and the media. Other contributors will help to clarify whether the ANC's intentions are capable of being met or whether the reality of current governance is likely to scupper potential achievement.

The drafters recognise that the global ICT revolution is turning the world into a "knowledge economy". This has fundamentally transformed the way people live and relate to each other.

Access to information and knowledge becomes the key determinant of the extent to which individuals, communities, societies and whole regions can shape their own lives and compete for jobs and services.

Globalisation, however, has also sharpened inequalities between regions and nations, and within nations, producing winners and losers and a core and a periphery. The ANC policy aims to fight this segregation and inequality nationally, regionally and internationally.

The document places more emphasis on the need for an overarching National ICT Policy to inform the future growth and developmental trajectory of the ICT sector.

# Information and Communications Technologies Perspective

The unprecedented social and economic revolution has been driven by the advent of high-speed Internet networks or information and communication technologies (ICTs) capable of transmitting huge chunks of information across borders with a single click.

These technologies have almost overnight blurred the traditional divide between the information technologies (computers), telecommunications (telephones), broadcasting (TV and radio) and content (newspapers). A single gadget can be used to engage in multiple transactions across these services. A cellphone can be used to generate documents, send email, and act as a radio and TV. New applications such as e-government, e-health, online money transfers, online billing, and payment of government and private transactions have emerged transforming the workplace and the skills that are required by the mainstream economy. These electronic based transactions have also reduced the need for paper and the distance and time people travel to do transactions. Access to information and knowledge becomes the key determinant of the extent to which individuals and communities contribute to their own and societal development.

The "digital divide" has constrained the ability of many citizens to participate in the mainstream economy thus entrenching the spectre of poverty and underdevelopment afflicting many people in the world as a whole and in our country.

ICT contributes to the economy both as a stand-alone sector and as a facilitator of growth and development across all other sectors of the economy, such as tourism and transport.

Trillions of rands are transmitted over ICT networks overnight, which redefines the flow of foreign direct investments across the globe. Money is now invested through computer networks and can be easily transacted across borders at short notice. As globalisation intensifies, driven by ICTs, it has also

sharpened inequalities between and within communities. South Africa is not an exception to the rising tide of inequality between the haves and have-nots.

The "digital divide" has constrained the ability of many citizens to participate in the mainstream economy thus entrenching the spectre of poverty and underdevelopment afflicting many people in the world as a whole and in our country.

Since 1994, South Africa has made significant strides to facilitate the transformation of the ICT industry. These include the introduction of new laws to facilitate the provision of ICT services to the people, including in rural areas and includes the licensing of community radio, ICT centres, and obligations on the mobile services.

South Africa hosts the most powerful computer system in Africa, which provides the country with capabilities to perform complex scientific and mathematical calculations to resolve environmental and biomedical sciences and the study of astronomy.

Government has also introduced other ICT innovations to involve young South Africans including out-of-school youth in ICT entrepreneurship opportunities.

Recently, South Africa has begun to lag behind in a number of key global ICT indicators, especially in universal access to the Internet, broadcasting and e-governance. This is due to fragmented and uncoordinated policy, and institutional arrangements. As a result, South Africa has not fully exploited the opportunities

presented by its technological advances. Even on the continent, South Africa has lost its position as a leader in the rollout of ICT services. Senegal and Egypt are emerging as leaders. South Africa also lags behind other BRICS in almost all aspects of the ICT value chain.

While cellular communications has reached over 100% penetration, the same cannot be said of the High Speed Internet Networks with penetration levels of less than 20% of the population. A significant number of South Africans access ICTs at their place of work and institutions of higher learning. The advent of smart phones is changing this.

The high prices charged by industry remain a big challenge towards a full utilisation of ICT services even by many people who already own smart phones.

Mobile broadband penetration still stands at less than 11% (households) and 8% (business), and fixed broadband in South Africa is below 10%.

The telecommunication infrastructure provided by Telkom is limited to 8% of the country's metropolitan councils and it largely covers work usage by government and large companies. Mobile operators such as MTN, Vodacom, Cell C and 8.ta provide high-speed 3G broadband/internet services. However, the speed of Internet reduces to 2G in some rural and remote areas and makes accessing Internet untenable.

Many young people from historically disadvantaged backgrounds come out of the Basic Education system never having been exposed to ICTs. This impacts their performance in institutions of higher learning, as well as their ability to adapt and become competent in the use of ICTs. Related to this is that the post-school education and training system (colleges and universities) produces graduates who are insufficiently e-skilled, regardless of their chosen profession.

Yet there is great potential in ICT Research and Development and Innovation that need to be unlocked in order for the country to become globally competitive.

South Africa has also not invested in developing specialised Research and Development Skills. Yet there is great potential in ICT Research and Development and Innovation that need to be unlocked in order for the country to become globally competitive.

One of the serious gaps that has constrained the ICT sector's ability to respond to the needs especially of the rural and urban poor, is limited consumer choice due to limited competition in the telecommunications and broadcasting markets, especially the pay TV market. Competition is important for consumers to choose and access their preferred service providers thus fuelling price wars in their own interest.

There are several reasons for current state of the ICT sector in the country including:

- The lack of a comprehensive National ICT Policy, leading to overlaps and competition within government;
- Institutional misalignment and limited accountability;
- · Limited e-skills within the state and society as a whole;
- High turnover, and corporate governance challenges in the key institutions and relevant departments;
- Inadequate funding of projects aimed at promoting universal service and access;
- Failure by the policy and regulatory institutions to enforce compliance with the law;
- · Limited and misaligned research and development;

- Policies are not based on evidence, hence they keep on changing even before the results can be realised; and
- Failure to implement some of the decisions of the previous ANC conferences and the National General Council.

Inform regulatory interventions to ensure a world-class digital infrastructure connecting business centres and households in all areas of the country including in rural areas; ... The drive towards a new vision of the ICT sector should seek to provide a long-term approach to addressing these challenges. In particular, the sector needs a long-term stability to be in a position to take the country into the next trajectory.

# **National ICT Policy**

To maximise the value of the development of ICT, and to also accelerate the uptake and usage of ICT tools, the ANC needs to create a coherent and co-ordinated National Policy Framework and Strategy.

The National ICT Policy will:

- Promote the provision of universal access to high speed, quality and affordable networks and services to ensure that government, communities, business and people become part of the Information Superhighway and the knowledge economy;
- Inform the deployment of ICTs across the country national, provincial and local infrastructure. It will also outline the different roles of the state, private and community sectors in achieving this goal;
- Align uptake and usage of the development of indigenous knowledge systems and the revival of the local content industry;
- Inform regulatory interventions to ensure a world-class digital infrastructure connecting business centres and households in all areas of the country including in rural areas;
- Define ICTs as a basic utility, similar to water and electricity;
- Set out targets to increase population coverage of high speed Internet access to 100% by 2030. This means that by the determined period, every South African should be within the reach of the ICT infrastructure. More endeavours, including access to receiver equipment such as computers, are needed to ensure that South Africans can use the available network;
- Provide for an institutional framework that enhances collaboration, effective planning and oversight;
- Outline approaches to ICT uptake and usage to promote e-applications in e-government, health, education and fighting crime.

### Institutional Mechanism

The institutional framework within government is perhaps the greatest barrier to the emergence of a coherent government strategic thinking, effective planning and deployment infrastructure and services to the people.

Government should develop and retain policy-making capacity. A National ICT Forum should be created comprising government and industry to engage on critical issues of mutual interest. Civil society should also be invited to participate in the Forum.

The following state institutions must be rationalised to address existing overlaps, duplication and undue competition within the state:

- Presidential National Commission on ICT (PNC);
- State Information and Technology Agency (SITA);
- Chief Government Information Council (GITOC);
- Government Information and Technology Officers at provincial level;
- Broadband Infraco and any other state owned entities in the ICT sector;
- Sentech:
- Universal Service and Access Agency of South Africa (USAASA);
- Media Development and Diversity Agency (MDDA);
- National Electronic Media Institute of South Africa (NEMISA);
- Meraka Institute;
- Media, Advertising, Information and Communication Technologies Sector Education and Training Authority (MICT SETA);
- Fibre Processing and Manufacturing Sector Education and Training Authority (FP&M SETA).

### Skills

E-skills should become a compulsory subject in all public schools to promote an e-literate society. This will also ensure that young people from rural areas are not abused by bogus training institutions in their quest to acquire the much sought after e-skills.

The curriculum should focus on end-user-computing as well as encouraging young people to pursue careers in the ICT sector. For South Africa to be a leader in the development, uptake and usage of ICTs, the country needs more skills than are currently available.

Other successful and leading nations have a dedicated university (or universities) to develop and produce highly skilled ICT practitioners and experts. Various options should be explored, including developing one of the existing universities to specialise in ICT.

Government must also maintain a comprehensive database of the current skills as well as those that will be required in the medium to long term. This would require harmonisation and creation of synergies between public and private sector initiatives.

Other successful and leading nations have a dedicated university (or universities) to develop and produce highly skilled ICT practitioners and experts. Various options should be explored, including developing one of the existing universities to specialise in ICT. Another consideration could be given to making one of the new universities in Mpumalanga or Northern Cape, or both, specialised ICT universities. All other universities, especially the historically black campuses, must be supported to offer ICT education.

Further Education and Training (FET) Colleges should also be used as schools of excellence to create opportunities for out of school and unemployed youth. A dedicated funding plan is needed to ensure that rural universities and FET colleges can contribute to the new e-skills revolution. The Skills Fund must prioritize the ICT skills development.

ICT industry plays an important, strategic role in skills development. Industry should be encouraged and incentivised to create opportunities for young people to receive experiential training. Government must introduce comprehensive e-Skills Development Plan that would include incentives to mobile industry co-operation for the benefit of young people. This must be in place by 2014.

# Transformation of the industry

Transformation is a protracted process that is dependent on the strategic vision and leadership provided by the ANC, and implementation of the developmental programme by the government that are aimed at meeting the needs of our society.

Whereas the ICT sector was the first sector to undertake steps to transform, much still needs to be done and more new innovative interventions are needed to speed up the pace of transformation in all elements of the value chain in the ICT sector.

Transformation of the ICT sector remains weak with Black Economic Empowerment (BEE) policy implemented to a very limited extent due to lack of adequate funding, procurement practices that do not promote black businesses, and absence of a focus on enterprise development. Black companies continue to be left behind in the consistent growth of the ICT market. Whereas the ICT sector was the first sector to undertake steps to transform, much still needs to be done and more new innovative interventions are needed to speed up the pace of transformation in all elements of the value chain in the ICT sector.

The ANC should target completing the ICT sector transformation process by 2030. At the end of this period ownership and control of the sector should reflect national demographics including the increased role and participation of black people, women and persons with disabilities in the sector.

The ANC needs to prioritise, *inter alia*, the following interventions:

A review of the empowerment targets in all the ICT subsectors and elements of the ICT value chain by 2014. This review will consider whether such targets are appropriate, reasons why they have not been met and what additional considerations should be given with regards to empowerment targets. The review would consider the regulatory and institutional structures overseeing the realisation of empowerment targets. To this end regulatory capacity will be strengthened to ensure the Independent Communications Authority of

- South Africa (ICASA) is capable to set and enforce empowerment obligations on the industry;
- In accordance with a drive towards vision 2030, the ANC should ensure that the empowerment rules apply equally to all entities - big and small local and international/multinational. The ANC should ensure that strong preference is given to new companies to access scarce radio frequency resources going forward;
- It is ANC policy to support the convergence of technologies and services. However, the regulation of the ICT sector in the converged environment should not lead to the creation of consolidated vertical and horizontal monopolies or to abuse of dominance by the existing operators. Competition rules and regulations dealing with opening the market to competition will be prioritised;
- The Universal Service and Access Agency (USAASA) charged with promoting access and universal service in under-serviced areas should be reviewed after over ten (10) years of existence in order to redefine its focus towards increasing the uptake and usage of ICTs;
- A new state entity to provide funding to Small, Medium and Micro Enterprises (SMMEs), Broad Based Black Economic Empowerment (BBBEE), Co-operatives and other Not for Profit initiatives in the electronic communications, broadcasting and postal sector should be created out of the merger between USAASA and the Media Development and Diversity Agency (MDDA) by 2014. The contribution by the industry to the merged entity should be uncapped and should be accompanied by a coherent plan to expend the current allocation;
- The ANC should ensure that endeavours to resource ICASA in line with the decision of the 3rd National General Council should have commenced by the time of the National Policy Conference. ICASA should be self-funding using licence fees, subject to Parliamentary procedures and oversight, by the beginning of 2013 financial year;
- Promote Broad Based Black Economic Empowerment at the minimum of 30% to 50% direct ownership and control of ICT and broadcasting, including the empowerment of women and youth development. This must be achieved by 2020.

Infrastructure development must prioritise government services and provide modern communication services to government departments, municipalities, schools, hospitals, clinics, police stations, multi-purpose community centres and courts to ensure that they are connected and can provide e-services to the people. Excess capacity should be geared to further connect rural areas to help achieve full access to high speed Internet networks by 2030.

The fact that South Africa does not design new innovations in the sector while a lot of money is pumped into the Science Councils is a serious missing link. For the country to position itself as an ICT hub for the continent, it requires high levels of research and development, and innovation, to allow for all manner of new inventions and technologies to emerge.

Government should provide capital to Greenfields operators starting business to provide amenities to under-serviced communities. These entities should also be entitled to a preferential interconnection (asymmetrical interconnection) rate and this should be mandatory.

The fact that South Africa does not design new innovations in the sector while a lot of money is pumped into the Science Councils is a serious missing link. For the country to position itself as an ICT hub for the continent, it requires high levels of research and development, and innovation, to allow for all manner of new inventions and technologies to emerge.

# High-speed Internet infrastructure and services

Access to digital infrastructure or, more specifically, high-speed Internet access, must be considered a basic utility for South Africans.

Informed by the National ICT Policy, government must introduce a National Broadband Plan. The National Broadband Plan must be revised and reviewed to take into account the proposals herein. The Broadband Plan must provide for:

 A world-class digital infrastructure connecting business centres, households in all areas of the country and people, particularly the poor, in the urban and rural areas is a prerequisite to the

- introduction of high speed access to modern digital means of communications, work and commerce;
- Affordable quality services that will ensure that the majority of South Africans have access to the internet platforms necessary for them to transact with each other, their government and the private sector.
- To expedite the deployment of high quality services, the National Policy should explore the combination of various reliable technologies such as satellite, wireless, fibre and other emerging technologies.
   The wholesale services provided by the merged entity between Sentech and Infraco should use these technologies.

High demand spectrum that can be used to deliver high-speed services using emerging technologies should be prioritised for assignment to new entrants. This should also encourage the use of emerging technologies that are spectrum efficient to increase competition and provide value for consumers.

Government must regularly conduct a review of spectrum usage to determine usage and re-allocation of unused spectrum where necessary. A strengthened competition framework that also addresses the quality and affordability of broadband infrastructure and services should also find expression in the National Broadband Plan.

The National Policy should also deal with the security of the High Speed Internet Networks (cyber security) to ensure information security, including the protection of vulnerable sectors of society such as children. A national cyber security policy is needed without delay.

In the light of the drive towards the new policy vision, there is a need to accelerate the endeavour to define needy people in order to address the utility expectations of, amongst others, people with disabilities, children, rural and urban poor. The needy people, clearly defined, should benefit from special subsidies to access and use communication services.

Publicfinance through the fiscus and the Developmental Finance Institutions (DFIs) should be set aside to fund broadband rollout as a national priority. There should be clear complimentary interventions between the contribution of the fiscus, DFIs and the merged entity between USAASA and the MDDA subsidising needy people.