

4. WHAT SUSTAINS THE IT FOCUS AREAS

To transform government into information age, it is necessary to address a range of issues which are common to all key IT focus areas. These include the development of IT skills, the advancement of service delivery focused IT research, the establishment of proper channels and functions for communication and liaison, and co-ordination and monitoring. Each of these issues is briefly explained below.

4.1. Crucial IT Skills

Skills development in IT must no longer be left to chance by the government machinery. The current situation develops IT skills in a haphazard fashion that is not necessarily beneficial to government service delivery initiatives. For instance, IT vendors prefer to develop more local IT marketing professionals to assist in increasing sales quotas. This is done at the expense of making South Africa dangerously dependent on foreign products, which require core IT skills from traditionally privileged communities or foreign workforce.

Currently, unscrupulous IT vendors claim to be developing appropriate government IT skills in every contract they obtain from government. Existing service level agreements are silent on how transfer of IT skills to government is measured and must happen.

The IT research and development skills are also left to chance as Government does not give research grants to specifically answer pressing national IT questions, that strive to benefit South African citizens. Regrettably, research sponsored by vendors is not necessarily geared to help South African citizens, but rather primarily geared to improve the vendor's bottom line regardless of any negative impact to government service delivery programme.

South Africa has a number of tertiary and research institutions that endeavour to research, among others, on IT questions. Government rewards such research, by subsidy grants to institutions, on the basis of publications in accredited journals. However, such incentives are elitist and cannot channel researchers to produce knowledge or answers to South African IT development questions.

Policy Recommendation	Target and Responsibility
<ul style="list-style-type: none">Encourage a code of ethics for anyone who must trade as an IT professional. This can no longer be left to chance given the cyber-crime and the impact of such criminality.	Immediately, and all organs of State shall execute. Impact within 1 st quarter

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<ul style="list-style-type: none"> • The education system must be persuaded to develop IT skills that address the service delivery imperatives of the country; • neglected communities must receive IT education from primary educational level; • fundamentals of IT, as opposed to transient aspects of IT should form the basis for IT syllabi; • room for exploitative fly-by-night IT academies must not exist; 	<p>Immediately, and the Department of National Education, PSETA, and SITA must execute.</p> <p>Impact immediately after 1st year of execution</p>
<ul style="list-style-type: none"> • Visa issues to foreign IT experts must be linked to producing a local understudy with the requirement to transfer specific skills in a specific timeframe. Renewal of such visas must be on the basis of past performance. 	<p>Immediately, and all organs of State shall observe, while the Department of Home Affairs executes. Benefits after 1st anniversary of issuing visas under the recommended guideline</p>
<ul style="list-style-type: none"> • Conscious effort must be made to attract designated groups to IT professions – specifically African females. 	<p>Immediately, and all organs of State shall execute.</p>
<ul style="list-style-type: none"> • Appropriate skills transfer, to develop and maintain IT infrastructure, must be packaged in contracts of government IT providers. 	<p>Immediately for any new IT contract, and SITA implements training. 75% impact by year of execution</p>
<ul style="list-style-type: none"> • Service Level Agreements and continued use of an IT vendor must include transfer of crucial skills to beneficiaries of the solution. • Such skills must be accreditable through the South African educational system. • IT vendors must have a minimum of 60% utilisation of local IT skills. 	<p>Immediately, and all organs of State shall execute.</p> <p>Impact after anniversary of visas issued after execution</p> <p>Will address so called IT skills shortage in South Africa</p>
<ul style="list-style-type: none"> • Participation in international programs (G7, EC, OECD, etc.) must be supported, with a view to craft solutions that are responsive to the South African developmental questions. 	<p>Immediately, All organs of State. Benefits within 12 months of execution</p>
<ul style="list-style-type: none"> • The Department of Education must take a leading role in stimulating IT education and research throughout its systems. 	<p>Within 1st academic year after adoption, the Department of Education should execute</p>

4.2. IT Research Programme

The e-government initiative will, to a great extent, be dependent on research aimed, among other things, at the government needs and the development of solutions to these needs based on future IT trends and offerings.

Policy Recommendation	Target and Responsibility
<ul style="list-style-type: none">IT research funded by public money or conducted by public institutions must seek to address the developmental or service delivery imperatives of the country.	Immediately, and all organs of State shall execute. Impact after the 1 st semester of implementation

4.3. Co-ordination and Monitoring

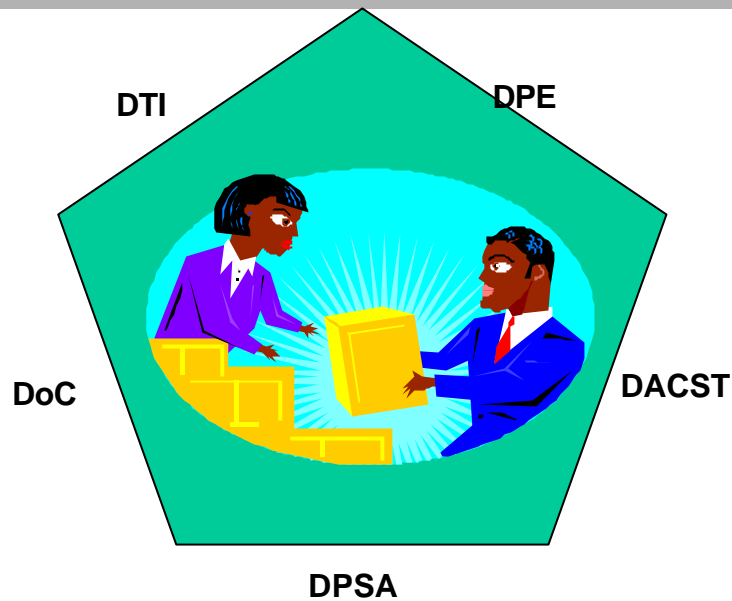
The digital revolution has the potential to alter our lives as comprehensively as the industrial revolution. The wide variety of activities that will be generated by the above recommendations will pose a co-ordination challenge to government.

Wide consultations are crucial for implementing a government policy and strategy of impeccable integrity. South Africa is counted among countries that lack laws governing Internet crime, a factor that is undermining international co-operation to eradicate IT viruses, denial of service attacks, identity theft, child pornography, and other forms of cyber crimes. Broader co-operation must be pursued with a view to achieve: promotion of and compliance with international standards, collaboration with NGOs, collaboration with our neighbours and enhanced integration of developing countries.

The major players within the information technology arena within government are: the Department of Arts, Culture, Science and Technology (DACST), the Department of Communications (DoC), the Department of Trade and Industry (DTI), the Department of Public Service and Administration (DPSA) and the Department of Public Enterprises (DPE).

The diagram below attempts to depict the delicate balance that needs to be struck in order to obtain a perfect pentagon relationship, sustaining the respective IT roles of these departments government-wide.

Government-wide IT Roles



The **DACST** is responsible for the promotion of science and technology in South Africa. This involves the development of school syllabus and research in institutions of higher learning. DACST is the department, which signs international agreements on science and technology on behalf of Government. Most of these agreements include IT as a major area of interest.

The **DoC** manages portfolio organisations which are IT-intensive, such as the SABC, Telkom, the Post Office and Sentech. The DoC deals mainly with policy formulation for its portfolio organisations, all of which operate throughout the country, and also focuses on the roll-out of communications infrastructure throughout the country, especially to previously disadvantaged communities.

The **DTI** deals with information technology within the economic sector, such as the South African Information Technology Industry Strategy (SAITIS), the Council for Scientific and Industrial Research (CSIR) and the diffusion of technology within the economic sector.

The **DPSA** has the task of overseeing the deployment of information technology within the entire public service and managing of the State Information Technology Agency (SITA).

The **DPE** manages all State-Owned Enterprises (SOE's), especially the 'big four': Transnet, Eskom, Telkom and Denel. The DPE has recently taken great interest in the information technology capabilities and activities of the SOE's, especially with preparations to licensing a second national telecommunications operator to rival Telkom. It also has a plan to merge the IT divisions of some of these companies into a single national IT company.

SITA was created to continually deliver on aspects of transformation, to free government departments and agencies from dicey and turbulent IT aspects, and

allow organs of state to focus on their core competencies. Organs of state will articulate their problems and desired outputs, while SITA gets suitable solution partners who must provide solutions and results to improve service delivery of various organs of state. The only true asset of SITA will be the relationship SITA has with its customers. The products SITA sells to its customers will consistently be in flux; therefore, the business relationship that SITA enters in order to service its customers will also be transient, with SITA retaining no stake in the products or services it leaves behind in order to bring its customers the next demand item, saving the government millions of rands.

SITA should strive to be a 'zero asset' manufacturer, i.e. SITA should deliver its products by striking outsourcing deals with strategic partners.

The **Government IT Officers' (GITO) Council** was created to serve as an IT co-ordination and consolidation vehicle in government, and as a radar that will assist in informing the government, on a continuous basis, when and how to intervene in the interest of enhanced service delivery to citizens. The GITO Council must:

- co-ordinate and consolidate IT initiatives in the whole of government, with a purpose of improving overall service delivery;
- assist to eliminate unnecessary IT duplications, share experiences on government IT initiatives, propose useful IT policy, and propose effective IT strategy;
- monitor the impact of IT on the overall government programmes;
- lead in determining IT skills needed to enhance government service delivery on the medium and long-term;
- assist in determining IT research questions to enhance service delivery.
- have a communication strategy to promote awareness and implementation of IT initiatives.

This is premised on the requirement, that each Government IT Officer is part of the executive team in the respective organ of state and responsible for the IT strategy and plan. Thus, brought together in the GITO Council, the Government IT Officers are best placed to pronounce on co-ordination and consolidation of the government IT initiatives.

Policy Recommendation	Target and Responsibility
<ul style="list-style-type: none"> • Government uses IT only as it improves government service delivery to citizens, and negative aspects of criminal consequences must be closely managed. The GITO Council could, as a government vehicle that monitors the use of IT, recommend strategies to squash emerging problems or to leverage emerging 	1 st quarter of agreement. GCIO leads and GCIS assists in the development of strategy and its co-ordinated implementation.

Policy Recommendation	Target and Responsibility
<p>opportunities, including:</p> <ul style="list-style-type: none"> • the emergence of <i>new partners and intermediaries</i> in the delivery of services; • <i>structural changes</i> within national government and in its relationships to other levels of government; • concerns about <i>privacy and confidentiality</i> in a world in which sensitive information flows across networks and the potential exists for amassing large files of information about individuals; • impact of IT on the country's developmental agenda (i.e. <i>is IT advancing or hampering growth?</i>); • accessibility by the previously neglected communities to government IT resources (i.e. <i>is the IT gap being closed or exacerbated?</i>); • effects on government service delivery; • influence on democratisation, patriotism and responsible citizenship. 	