



Province of the  
**EASTERN CAPE**  
REPUBLIC OF SOUTH AFRICA

# Eastern Cape Information and Communication Technology Strategy

2009 - 2014



*Ikamva eliqaqambileyo!*





## **MESSAGE FROM THE PREMIER**

The delivery of the PGDP objectives relies on the growth of the Information Communication Technology (ICT) sector and diffusion of ICTs in all parts of the economy. In order to ensure future economic growth of the Eastern Cape (EC), the top priority is to implement the EC programme of action, which calls for measures to promote e-government and e-learning. The strategy demands an improvement in the accessibility of government services by 2014.

ICT is a central nervous system of government operations and currently accounts for the majority of capital expenditures within government. It should therefore be treated with at least the same due diligence as any other capital investments in the province. Sound business cases that support our economic development strategy (PGDP) in the province must be created.

In this information age, optimising information technology investments is not an option, but a business mandate of government, given the many opportunities for value creation, cost savings, timeliness, and accurate information that serve as seminal elements of high performing organisations.

Our unwavering commitment to this ICT Strategy will underpin social transformation and ensure sustainable and equitable economic growth.

A handwritten signature in black ink, appearing to read 'Noxolo Kiviet', written over a solid black horizontal line.

Noxolo Kiviet

**Premier: Eastern Cape**



## **PREFACE**

On behalf of the Eastern Cape Provincial Government, I am pleased to present this Integrated Provincial Information Communication Technology (ICT) Strategy 2009-2014. This is an exciting initiative for the Province and is directed at supporting the PGDP goals and objectives. We are well into the timeframes of the Eastern Cape PGDP, thus ICT Strategy will go a long way in supporting the Provincial goals to 2014.

We believe that ICT could play the dual role of enhancing social and economic development by acting as an enabler of service provision as well as an industry in its own right. ICT can enable the Eastern Cape to make significant improvements in both productivity and service quality across all industries. Therefore, the ICT decisions and actions we take are critical in determining how we fare in our fight against wide-spread poverty.

Through developing this integrated ICT strategy, we have tried to ensure that the ICT initiatives have a broad reach and will deliver maximum value to the majority of Provincial citizens. As a Province, we acknowledge that there is still much work to be done to deliver these programmes; however, we are confident that with the participation of our strategic partners, we will be successful.

This strategy is the result of a consultative process involving internal and external Provincial stakeholders. We thank all those who gave time towards this large task and hope that their efforts continue to ensure the success of ICT in the Province.

It is our desire that our endeavour to make the Eastern Cape a compelling place to live, work and invest in will be achieved.

---

Dr. Sibongile Muthwa

**Director General: Eastern Cape**



## FOREWORD

I am excited about the opportunity to share with you the Eastern Cape Information Communication Technology Strategy for 2009-2014. This is truly the culmination of enterprise-wide efforts towards an Information Technology (IT) strategic planning process. This document is the result of collaboration and partnership between the Provincial Government and Stakeholders. The Plan clearly demonstrates our vision for Information Communication Technology (ICT) and our understanding of the importance of a citizen centric approach to Information Technology investment decision-making. It also reveals the Provincial long-term Information Technology Strategic intent, which gives the highest priority to initiatives that will address enterprise-wide challenges.

The ICT Strategy must support the Province to achieve Accelerated Human and Economic Development toward Global Competitiveness. The Strategy embodies the national goals: developing our people, fostering innovation, strengthening governance, and creating jobs; which are pillars of development for any successful society in today's global landscape.

Investment in e-Government and ICT connectivity initiatives has the potential to save tax payers' money, enable better allocation of resources and transform the citizens' experience. This however requires reliable project delivery based on robust and repeatable processes. The PGITO Council thus has to refocus its attention on provincial government's overall investment in IT to:

- Match IT supply with provincial business demand;
- Identify duplication and other opportunities for standardisation and sharing;
- Develop Provincial enterprise architecture and ICT governance policies; and
- Measure the impact of ICT projects against the Eastern Cape ICT Strategy Mission.

The Plan is based on a comprehensive vision to 'make Eastern Cape the place of choice to live, work, raise families, and do business;' and on Guiding Principles which put 'people' at the centre of the provincial transformation.

We are committed to implementing the initiatives we have identified in this ICT strategy and will review our progress against the plan on an annual basis. There will be some challenges on this journey, but they will not hold us back from the mission we have embraced.

---

E.N. Ngcingwana

### **PGITO: Eastern Cape**

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### **Government and Organised bodies within the Eastern Cape**

- Office of the Premier;
- Department of Education;
- Department of Roads and Transport
- Department of Health;
- Department of Social Development;
- Department of Safety and Liaison;
- Department of Housing;
- Department of Local Government;
- Department of Agriculture;
- Department of Sports, recreation Arts and Culture;
- Department of Public Works;
- Treasury;
- PGITO Council & LGIT Council; and
- Department of Labour.

### **District Municipalities**

- Chris Hani District Municipality;
- Ukhahlamba District Municipality;
- Amathole District Municipality;
- Alfred Nzo District Municipality;
- OR Tambo District Municipality;
- Cacadu District Municipality;
- Nelson Mandela Metro; and
- Buffalo City Municipality.

### **Government-related Entities and Agencies**

- State Information Technology Agency (SITA);
- South African Local Government Association (SALGA);
- Eastern Cape Socio Economic Consultative Council (ECSECC);
- Nelson Mandela Bay Tourism;
- Port Elizabeth Regional Chamber of Commerce;
- Automotive Industry Development Centre (AIDC);
- Youth Commission;
- Eastern Cape Appropriate Technology Unit (ECATU);
- Eastern Cape IT Initiative (ECITI): East London;

- NAFCOC;
- Eastern Cape Parks Board;
- Eastern Cape Gambling and Betting Board;
- East London Industrial Development Zone; and
- Coega Development Corporation.

### **Academic Institutions**

- Rhodes University;
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- University of Fort Hare; and
- Walter Sisulu University.

### **Commerce and Industry**

- Vodacom;
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- Continental Tyres SA; and
- General Motor SA.

### **Individuals:**

- Director General: Office of the Premier;
- DDGs : Office of the Premier;
- Heads of Departments;
- Provincial CIO;
- DGITOs/CIOs;
- Head of ASGISA: Office of the Premier;
- Chairperson of NAFCOC;
- Human Resource Development ,Office of the Premier;
- Infrastructure Senior Manager, SITA;
- Steering Committee members for ICT Strategy; and
- People of the Eastern Cape.



# 1

## Summary



*Ikamva elizaqambileyo!*



## Executive Summary

The ICT Strategy outlines a new strategic direction for ICT within the Province, aimed at giving impetus to the National and the Provincial mandates, with specific focus on the Eastern Cape Provincial Growth and Development Plan (PGDP).

Primary international and national drivers for the Strategy include the World Summit on Information Society (WSIS, 2003, 2005) Declaration of Principles; United Nations Millennium Development Goals (UN MDG); and the Pacific Council on International Policy Roadmap on e-Government.

The Provincial ICT Strategy will enable the Province to lay the foundation for improved service delivery, based on the Provincial Strategic Framework, which articulates eight strategic priorities for this 2009 – 2014 Five year term.

The Eight strategic priorities from the Premier's State of the Province Address are:

- **Speeding up growth and transforming the economy to create decent work and sustainable livelihoods,**
- **Building social and economic infrastructure,**
- **Rural development, land, agrarian reform and food security,**
- **Strengthening education, and building a skills and human resources base,**
- **Improving the health profile of the Province,**
- **Intensifying the fight against crime and corruption,**
- **Building a developmental state, improving the public services and strengthening democratic institutions,**
- **Building cohesive, caring and sustainable communities**

The ICT Strategy is aimed at enabling improvement of service delivery especially to rural communities and will provide a clear strategic intent for ICT development within the Province. More specifically, the transformation of the Eastern Cape ICT capability focusing on the following eight building blocks:

- **ICT sector Development and Innovation;**
- **ICT adoption and usage by Public: Streamline and automate key citizen-facing business processes;**
- **Human Resource Development: R&D by academia and Advance the ICT skills of citizens, with a particular focus on SMMEs, youth and graduates;**
- **ICT Governance: Improve ICT Governance, transparency and accountability;**
- **ICT Infrastructure Development: Incorporate broadband connectivity for businesses and citizens;**
- **ICT Enterprise Architecture**
- **2010 Support Projects: Preparations for the FIFA 2010 Soccer World Cup;**
- **Shared Services and Business Process Outsourcing**

In efforts to move away from traditional ICT, the strategy proposes the investigation of ICT as an industry in its own right. The intention is to expand the economy and increase employment in the industry.

The ICT Strategy has been created for the period 2009 – 2014 to coincide with that of the PGDP. Over the next year, the priority areas are:

- **To urgently support the development of infrastructure that will provide greater access to low-cost high bandwidth Internet connections and the use of affordable software (open standard and open source);**
- **Human Resource Development Education and Training -Capacity-building;**
- **Bridging the Gender digital divide (Woman in ICT);**
- **M-Commerce and M-Government (Mobile Government);**
- **Recruitment and Retention-Eastern Cape Brain Drain Reversal;**
- **Creation of an integrated Provincial Enterprise Project Management Office (EPMO) supported by well-defined ICT Governance; and**
- **Definition of the Provincial Enterprise Architecture, aimed at supporting the Information Society vision of the Province.**

The programmes identified in the ICT Strategy aim to transform Eastern Cape Province into an information knowledge-driven province. In setting out the direction, the strategy will lay emphasis on the development, deployment and exploitation of ICT to aid the development of other sectors of the economy. The content of this document is structured as follows:

- **Chapter 1** provides an **executive summary** of the ICT Strategy;
- **Chapter 2** will introduce the ICT Strategy, the drivers behind its creation and the approach followed to develop the strategy;
- **Chapter 3** will discuss the findings from the current-state assessment in the Province, during which more than 60 individuals were interviewed, this outlines the **Demand strategy**;
- **Chapter 4** will introduce the Provincial guiding principles for ICT, outlining the **Control strategy**;
- **Chapter 5** will provide an overview of the proposed ICT programmes and the initiatives therein which then forms our **Supply strategy**;
- **Chapter 6** will discuss the critical success factors for the delivery of the ICT programmes themselves and is basically our **Risk and Issues strategy**.

Though a comprehensive list of programmes is in place, the road to a transformed ICT sector is still long. Joint effort and partnerships are required to fulfil the objectives and to lay a foundation for a bright and prosperous future for all citizens in the Information Society.

# 2

## Introduction



*Ikamva eliqaqambileyo!*



## **2. Introduction**

This section serves to describe the background and the approach in creating a single ICT Strategy for the Eastern Cape Province. To gain buy-in, stakeholder involvement was key to the creation of the ICT Strategy document.

### **2.1 Background**

The South African government has made a commitment to attaining an Information Society. South Africa is a signatory to the WSIS Declaration of Principles. The Eastern Cape Province ICT Strategy is aligned with the vision of the WSIS Declaration of Principles “To establish South Africa as an advanced Information Society in which Information and ICT tools are key drivers of economic and societal development.” The Province therefore subscribes to the international WSIS Plan of Action targets to be achieved by 2015:

- to connect villages with ICTs and establish community access points;
- to connect universities, colleges, secondary schools and primary schools with ICTs;
- to connect scientific and research centres with ICTs;
- to connect public libraries, cultural centres, museums, post offices and archives with ICTs;
- to connect health centres and hospitals with ICTs;
- to connect all local and central government departments and establish websites and email addresses;
- to adapt all primary and secondary school curricula to meet the challenges of the Information Society, taking into account national circumstances;
- to ensure that all of the world's population have access to television and radio services;
- to encourage the development of content and to put in place technical conditions in order to facilitate the presence and use of all world languages on the Internet; and
- to ensure that more than half the world's inhabitants have access to ICTs within their reach.”

The Eastern Cape Provincial Growth and Development Plan (PGDP) describes the goals of the Province as: to contribute towards the alleviation of poverty, stimulate

growth, build infrastructure, create jobs, develop agriculture and transform Government.

The PGDP also aims at creating a better future for the citizens of the Eastern Cape.

The strategic priorities for the Eastern Cape as articulated in the PGDP are:

- The systematic eradication of poverty;
- The transformation of the agrarian economy;
- Developing and diversifying our manufacturing and tourism sectors;
- Building our human resource capabilities;
- Infrastructure, including the eradication of backlogs and the development of enabling infrastructure for economic growth and development; and
- Public sector and institutional transformation in support of improved service delivery.

As the national government moves to accelerate service delivery and improve the performance of the economy, it is important to note government's Business Unusual agenda and its related list of 24 Apex priorities for urgent action and contribution by all spheres of government:

- Industrial Policy Action Plan;
- Set up an investment call centre;
- Speed up ICT interventions to provide cheap platforms;
- Implement intensive campaign on energy security;
- Resolve organisational issues on skills development;
- Resource poor schools and monitor learning outcomes;
- Speed up land and agrarian reform;
- War against Poverty;
- Self-/employment interventions in the Second Economy;
- Speed up community infrastructure programme;
- Ratchet up implementation of ECD programme;
- Intensify campaign on communicable diseases;
- Assistance to SMEs including procurement activities by government;
- Implement special social cohesion campaigns;
- Regularise employment and KPA at designated levels;
- Ensure integrated planning across all spheres;
- Improve civic services;
- Implement special crime combating & security initiatives;
- Reduce number of cases pending trial;
- Partnerships and communication on fighting crime;
- Continue to facilitate resolution of political challenges facing Zimbabwe;
- Consolidate advances relating to peace and reconstruction in DRC;
- Intensify economic diplomacy and communication; and

- Increase SANDF (MSD) intake of young trainees.

The Eastern Cape Provincial Government has embarked on a 10 year journey to address the existing multifaceted challenges facing the Province both internally and externally. The Eastern Cape is confronted with unique challenges. Internally, the Province has a strategic mandate to accelerate and maximise the ‘machinery’ for service delivery, while externally, the Province is responsible for responding to the needs of the citizen. Furthermore, the Provincial Government needs to formally engage with business and academic stakeholders to create an environment conducive to job creation, skills development and expansion of the economy.

The ICT strategy sets the direction for a bold agenda for redefining how to effectively exploit ICT to support the Province’s strategic imperatives.

The ICT strategy’s execution will subsequently be detailed in the Provincial ICT implementation plan which will inform the Departmental Master Information System Plans (MISPs) and Local Government Integrated Development Plans (IDPs).

## 2.2 Intent of the ICT Strategy

***Our Honourable Premier, Noxolo Kiviet, in her message for this document stated that “In this information age, optimising information technology investments is not an option, but a business mandate of government, given the many opportunities for value creation, cost savings, timeliness, and accurate information that serve as seminal elements of high performing organisations. Our unwavering commitment to this ICT Strategy will underpin social transformation and ensure sustainable and equitable economic growth.”***

***In her State of the Province Address for 2009, the Premier highlighted our Provincial Strategic Framework which we have reproduced earlier in this document and further in her Policy speech for Vote 1 on the 18th June 2009, our Premier emphasized on the need to provide and coordinate integrated and coherent information technology services within the provincial government.***

The intent of this Provincial ICT strategy is, therefore to:

- Concurrently target the development of the ICT sector and to use ICT’s as a broad based enabler in the achievement of the Provincial Government Development Plan (PGDP) goals;
- Promote the deployment and exploitation of information, knowledge and technology within the economy and society as key drivers for socio-economic development;

- Act as a catalyst in the modernisation of Eastern Cape Province's educational system using ICT's to improve and expand access to education, training, research resources, facilities, the quality of education and training and make the educational system responsive to the needs and requirements of the economy and society with specific reference to the development of the information and knowledge based economy and society;
- Create a Supportive ICT infrastructure for the preparations for the FIFA 2010 Soccer World Cup;
- Enhance our Provincial delivery capability; and
- Setup structures to improve ICT governance, strategies implementation and co-ordination.
- Through appropriate ICT investment and the deployment of best-fit ICT solutions, increased productivity, reduced costs, higher performance and positive service delivery should impact on the life of citizens of the Province. This will fulfil one of the ECPG's primary mandates: driving public value through on-line services via all access points in the Province. To leapfrog the current situation, our Provincial leadership in every department needs to unequivocally recognise that:
  - Information and Communications Technology (ICT) is essential for high performance and enhanced service delivery;
  - ICT plays a fundamental role in Government as a strategic business driver, particularly with regards to the development goals outlined within the PGDP;
  - ICT must be integrated and coherent, supporting the continuity of essential services and functions and enabling the Eastern Cape Government to deliver high-quality citizen-centric services; and
  - Insightful and integrated Corporate Governance and hence, ICT governance will lead to high return on investment (ROI), in terms of Information Society/Knowledge Economy.

This suggests concerted alignment with the strategic priorities framework 2009 – 2014.

To sustain the ECPG's social model of higher growth and increased employment will require powerful, committed and convincing political leadership. All government entities must re-double their efforts to make these changes happen. Far more emphasis must be placed on engaging industry, academic institutions, business partners and the Eastern Cape citizenry in the socio-economic case for change.

## **2.3 Vision, Mission and Values for Eastern Cape ICT**

### **2.3.1 Vision**

*“Eastern Cape, a regional competitive, knowledge and information society where lasting improvement in social, economic and cultural development is achieved through effective use of ICT”.*

The vision for ICT provides an inspirational guide for the implementation of the ICT Strategy. The ICT vision for Eastern Cape is underpinned by the national 2014 vision which is articulated in the Manifesto: A people’s Contract to Create Work and Fight Poverty, which runs until 2014 and supports the Province in achieving its socio-economic objectives.

### **2.3.2 Mission**

*“To enable the Eastern Cape to become a ICT leader in the development, adoption and adaptation of information and communication technologies, and in the application and diffusion of these technologies in order to achieve social development and sustainable and equitable economic growth”.*

Without any doubt, the effective deployment of information and communication technologies can reduce inequalities between rich and poor, and between urban and rural communities. The responsibility lies with the ECPG to provide sufficient access to these technologies, to empower the disadvantaged to exploit these technologies and to sustain efforts to do so.

### **2.3.3 Goals and Objectives**

Goals:

The Eastern Cape Provincial Government will:

- Extend ICT networks and capabilities to provide access to Government services;
- Leverage internal resources to support the citizens, especially in the drive to alleviate poverty;
- Strive to be the leader in Africa in providing connectivity to rural citizens, schools, hospitals and community centres;
- Enable ICT Skills development and improve ICT literacy in the Province;
- Ensure the support of SMME and youth in entering into, and operating within, the ICT market;
- Move services online and communicate electronically with citizens;
- Promote transparency of ICT decisions and activities; and
- Mitigate ICT and service delivery risks by partnering with key players in the value chain.

### 2.3.4 Objectives:

The following are strategic objectives for the EC e-Government:

- To adopt ICT and both to enhance service delivery and productivity;
- To create an ICT governance framework and support structures;
- To create a strategy for ICT sector development and innovation;
- To develop an Eastern Cape –wide Enterprise Architecture; and
- To create structures and strategies for capacity building of ICT HRD education and Training.

### 2.3.5 Values

The Eastern Cape Provincial Government seeks to be a leader in: the provision of ICT-related services to citizens; investing in the development of people (human capital); and providing cost effective robust ICT solutions. The Province will balance long-term development and short-term results in pursuit of this objective. Our approach is based on four core values:

- **Citizen Centricity:** Advancing the interests of all citizens across the Province in a balanced way;
- **Effective Partnerships:** Partnering with other public service providers, local businesses and academia to promote better use of ICT in the Province;
- **Enabling environment:** Fostering an environment conducive for promoting business opportunities, supporting human resource development and advancing human-computer interaction; and
- **Focused advancement:** Being strategic, action-oriented and innovative in entering and expanding service delivery.

## 2.4 Guiding Principles of the ECPG ICT Strategy Creation

The following guidelines principles were defined as key to developing a compelling ICT Strategy for the Eastern Cape:

- Stakeholder involvement was key to the creation of the ICT Strategy document;
- Availability of broadband connectivity is crucial to the provision of services, the efficiency of businesses operating in the Province and to increase communication between provincial departments and other stakeholders across the Province. This needs to be considered for the various programmes;
- ICT should be utilised to enable Human Resource Development in the Province (e.g. harnessing ICT skills within educational institutions, creating an environment conducive to gaining ICT knowledge through e-learning based programmes)
- Consolidation of disparate information should lead to better decision-making

- through “an integrated view of Provincial information” using leading practice standards;
- Where possible, processes should be automated to improve service delivery across the Province; and
- The ECPG cannot achieve the objectives of this ICT strategy alone without exploiting partnerships with industry and academic institutions and with other stakeholders external to the Province.

## **2.5 ICT Strategy Approach**

A key requirement for the ICT Strategy is to ensure that it has both an external, citizen-centric focus aimed at addressing the goals of the PGDP as well as an internal focus on the ECPG to ensure a solid ICT foundation to support delivery. Further, to ensure that the needs of the different stakeholders have been addressed, different sets of stakeholders were to participate in the process of creating the ICT Strategy.

For the development of the strategy, a current state assessment has been first conducted and stakeholder requirements were identified. This information provided an updated view of the state of Provincial ICT and a foundation for the identification of initiatives. Thereafter, programmes of initiatives were identified, prioritised and detailed into execution plans.

The key ideas for the ICT Strategy were presented at the Eastern Cape ICT Summit 2008. Four commissions were held with the conference delegates to discuss key strategic themes in the ICT Strategy to discuss the following topics:

- ICT Governance;
- Human Resource Development;
- Connectivity and Accessibility; and
- The PGDP and Economic Development using ICT.

The commissions provided an opportunity for more citizens and stakeholders to be involved in the strategy creation. The outcomes of the commissions concurred with the findings from the detailed assessment.

The high levels of participation during the ICT Strategy creation reflect the eagerness for change and the willingness by stakeholders to support Government. The next step is to take action quickly through detailed solution planning, design and execution. The Eastern Cape Province is committed to delivering on the directions outlined in this ICT Strategy in order to support the PGDP and to improve service delivery and access to citizens across the Province, especially in rural, under-served areas. This must be supported by suitable provincial budgeting.



# 3

## SWOT Analysis



*Ikamva eliqaqambileyo!*



### 3. Current State

#### 3.1 Key Challenges

While the Province has made initial significant strides towards achieving the goals of the PGDP, there are vital outstanding challenges that need to be urgently addressed as part of the 2014 transformation journey regarding ICT:

- **Integration:** Even though there are MISPS in the Province, there is little integrated strategic direction for IT application and service delivery processes across the three spheres of Government (National, Provincial and Local). This can be achieved in the Eastern Cape through a comprehensive and coherent Provincial Strategy. This impacts negatively on service delivery and creates misalignment of initiatives and a lack of integrated planning across the Province. Integration is further required across the Province's systems and processes to enable interoperability and seamless service delivery. This can be achieved through development of a Province-Wide Enterprise Architecture;
- **ICT Governance:** Although there exists some form of ICT standards and norms within the various ECPG structures, there is no clear province-wide governance framework with supporting policies and standards. This framework is key to ensuring that ICT investment in the province is optimised and co-ordinated for maximum creation of value for the ECPG. The framework should include governance structures, processes and metrics that demonstrate the creation and realisation of this value;
- **Inadequate ICT Connectivity Infrastructure:** High levels of illiteracy and a lack of ICT infrastructure in the Province, especially in rural areas, combined with a lack of access to information and communication channels, which enable Government to engage with citizens and for citizens to be empowered to make informed decisions, have exacerbated the poor service delivery. In addition, there is no consistent directive to service providers on connectivity intent for rural areas;
- **Human Resource Development:** There is a significant shortage of critical skills within the Province. This makes Province dependant on other Provinces for ICT resources. Consequently, the Province is not perceived as providing an enabling environment for growth in the ICT sector. This has faced the Province with high staff turnover in ICT related positions. The provincial Human Resource Development programme has not identified ICT as a sector nor has the PGDP;
- **Service Delivery:** The service delivery performance does not give a good picture as indicated in the Auditor General's reports. In order to improve ICT within the Province and to answer the needs of citizens, business, potential investors and the PGDP, it is necessary to create a culture of service delivery and high performance in Government. Certain institutions, both academic and

private, are investigating how technology can enable and service the community at large e.g. through community support projects.

Thus a high-performing organisation needs to be in place to be able to support such private initiatives. This will be reinforced through transparent and robust ICT Governance; and

- Positioning of ICT within the Province: The value of ICT in the Province as a strategic enabler of Provincial activities has not been well articulated and is not well understood. As a result, insufficient budgets have been assigned to IT in the Province to execute strategic activities. This must be reconsidered for implementation of the Provincial ICT Strategy. Increased political commitment and sponsorship will also provide confidence to investors and strategic partners regarding the serious intentions of the ECPG.

### **3.1.1 Significant Achievements**

The ECPG has achieved significant milestones which form the foundation for implementing the ICT Strategy:

- ICT Governance: From a national level, there has been a call for Provincial Government to integrate ICT Policy as part of Governance – this represents the recognition within Government of ICT’s potential to become an enabler in contributing to economic development;
- Service Operations and Efficiency: The Eastern Cape Department of Social Development (ECDOSD) has automated some of its processes, demonstrating the ability for other ECPG departments to automate their service delivery;
- ICT Innovation: The ECDOSD’s Social Development Information System (SDIMS) has demonstrated the provincial ICT ability to contribute towards contributing towards PGDP strategic objectives. The SDIMS won the Department of Public Service and Administration (DPSA)’s Innovation Award, as well as placing fourth in the Commonwealth Innovation Awards. This system is currently being rolled out nationally.
- Alignment: Provincial Government IT Officers Council (PGITOC) and Local Government IT Council (LGITC) meetings are already established and can be refocused to become more strategic in nature;
- Infrastructure Investments: With R3.8 billion already invested in Nelson Mandela Bay municipality alone, the Province is attracting significant investments in infrastructure, property and the Coega development project; and
- Skills Development Initiatives: The Province is committed to enhancing and retaining critical skills, evident from initiatives such as those carried out by the

Departments (Public Works, Roads & Transport, etc) which funds bursaries for students enrolling in Built Environment, Civil and Mechanical Engineering; Maths & Science as well as the ICT SMME hubs in East London and Port London.

## **3.2 SWOT Analysis**

### **3.2.1 Background**

This section provides a SWOT (Strengths, Weaknesses, Opportunities and Threats) analysis summary of the findings from the “current state assessment” of the Eastern Cape ICT Capability. Based on information gathered and stakeholder discussions, the following strengths, weakness, opportunities and threats have been identified for the ECPG.

### **3.2.2 Strengths**

The Province has an approved overarching Master Information Systems Plan (MISP) and all the provincial departments have their MISPs.

- The PGITOC and LGITC meetings are already established and facilitate collaboration across Provincial and Local Government. These meetings are currently operational in nature but their establishment eases the ability to redirect their approach to become more strategic in nature and to ensure strategic alignment between ICT and business goals;
- DGITOs are aware of the ability of technology to support various Eastern Cape initiatives (such as Telemedicine and agro-processing) and are trying to increase the influence of ICT within such initiatives;
- DGITOs are motivated towards finding innovative ways to communicate with the citizen more effectively, i.e. using bulk sms’s to send key market data to farmers; and
- There are innovative initiatives that are promising to bear fruit in terms of how ICT can change the lives of the citizens. For example, automation of key citizen-facing processes, illustrating the ability for other ECPG departments to automate their service delivery and to learn lessons from the implementation of these projects in an Eastern Cape relevant context.

### **3.2.3 Weaknesses**

- The integration and co-ordination mechanisms among spheres of government are managed, but maturity-capability needs to reach optimised levels;
- Management of IT needs to move from being more operational to being more strategic in nature;

- Paucity of integration between academic research and government projects;
- Service Management within the ECPG needs formal implementation, to strengthen the working relationship with SITA;
- Lack of consolidated information inhibits decision-support and business intelligence;
- Project management and change management are not positioned at a suitable level of importance;
- ICT Governance and related processes need to be optimised. Policies required to support effective Governance e.g. budgeting and business continuity are not prioritised sufficiently; and
- There are few channels for engagement between Government and external parties, such as industry and academia, focused specifically towards the development of ICT to address the needs of the Eastern Cape. This is not supportive of meeting the needs of these external parties and subsequently to support the goals and objectives of the PGDP.

#### **3.2.4 Opportunities**

- Numerous opportunities exist for research and academic institutions, service providers and industry involvement in researching, planning and deploying ICT (including infrastructural) solutions to under-served areas;
- Industry is willing to collaborate with Government in strategic interventions and service delivery initiatives, such as connectivity initiatives. A clear and specific strategic intent from Government is required to secure investment from industry. Collaborating with industry to improve connectivity will make it possible for Government to address the needs of industry and academic institutions to become more competitive and aligned with the specific needs of the Eastern Cape;
- Government has the opportunity to align strategic interventions with industry needs and Government requirements and initiatives, such as ASGISA and JIPSA. In so doing, Government has the ability to address the human resources development and poverty eradication goals outlined in the PGDP in a more structured manner. Collaborating with industry in such strategic interventions will enable the ECPG to deliver services in a more citizen-centric approach;
- Collaborating with academic institutions presents an opportunity for Government to address the skills shortage at an academic level, making the approach towards skills development in the Eastern Cape more sustainable. Through aligning curricula, resources and skills offering to the specific needs of the Eastern Cape industry and Provincial Government, the ECPG can address the PGDP goals of Human Resource Development and formal job

creation, which stimulates economic growth and development within the Eastern Cape as a whole;

- The two ICT innovation hubs – though presently suffering from poor service coordination – offer good potential to the Eastern Cape Province (if effectively managed and coordinated), particularly in the goal of developing SMMEs and encouraging entrepreneurship, formal job creation and economic growth;
- There is a call for Provincial Government to integrate ICT Policy as part of Governance – this represents the recognition within Government of ICT’s potential to become an enabler in contributing to economic development; and
- IT departments within the ECPG are largely inward-focused, but are becoming increasingly aware of some IT initiatives that could enable improved service delivery within the Eastern Cape.

### **3.2.5 Threats**

The Eastern Cape is largely rural and this, coupled with the vastness of the landscape and current paucity of infrastructure, inhibits the infiltration of ICT.

- Connectivity in rural areas is still sparse. Both wireless and cabling infrastructure deficits still need to be addressed;
- The largest threat to the Eastern Cape is in the ICT skills drain. Students and graduates are more attracted to study and work opportunities in other provinces, creating a skills shortage within the Eastern Cape that is detrimental to economic growth and development. The staff turnover rate within the ECPG is high and vacancies are not filled quickly, negatively affecting the Government’s ability to deliver on time and within budget;
- The operation of Government structures in silos serves as a direct threat to creation of a seamless customer experience; and
- Insufficient cooperation from public entities. A coordinated effort and general acceptance of the strategy are required.



# 4

## Guiding Principles for ICT



*Ikamva elizaqambileyo!*



#### **4. Applicable Regulatory, Statutory Documents and Mandates**

The Provincial ICT Strategy has been guided, inter alia, by the following documentation and policies:

- Constitution of South Africa;
- Provincial Government Development Plan (PGDP);
- United Nations Millennium Goals;
- National Apex Priorities;
- Provincial Government Strategy Plans;
- Accelerated and Shared Growth Initiative for South Africa (ASGISA);
- Joint Initiative on Priority Skills Acquisition (JIPSA);
- Provincial and Departmental Master Information Systems Plan (MISP);
- Local Government IT Council (LGITC) Charter – Constitution;
- LGICT Strategy 2008;
- Managing Electronic Records in Governmental Bodies: Policy, Principles and Requirements;
- Using Open Source in the South African Government: a Proposed Strategy Compiled by GITOC;
- Auditor-General Act, 1995 (Act No 12 of 1995);
- National Archives and Records Service of South Africa (ACT No 43 of 1996);
- Public Service Act, 1994 (Proclamation No. 103 of 1994); and
- SITA Act, Act No. 88 of 1998 and SITA Amendment Act 2002.

##### **4.1 Guiding Principles for ICT**

To achieve the vision for ICT articulated in this strategy, the Provincial Government will be referenced by sound operating principles that include:

- ICT investments should show a direct or indirect return to citizens;
- The Provincial Departments should work jointly with the relevant ICT structures in the definition, design and delivery of solutions;
- Information should be viewed as a Government asset;
- Processes should be automated to enable data to be captured only once at source in as controlled a manner as possible;
- Provincial ICT should form a constructive, close working relationship with SITA based on mutual respect and trust;
- Provincial ICT should work with business, academia and service providers to deliver services to all citizens;
- Where possible, ICT should use “Green IT” principles in the execution of IT activities, including disposal of ICT assets;

- Continuous knowledge and information transfer to users (public entity staff and the public);
- Interface forums between government and stakeholders must be regulated; the DGITOC and LGITC are meant to be regulated by charters/constitutions (as per IGRF Act);
- An ICT Policy should be published to direct and incentivise investment and participation in an Eastern Cape ICT Sector;
- New ICT projects in the Province should be registered in the Project Management Office in the Office of the Premier for compliance-verification (with Government-Wide Enterprise Architecture and Minimum Interoperability Standards); and
- All systems should be developed with consideration of open standards as a preferred platform (e.g. Open Document Format (ODF), XML , WS-\* and OGSA ).

# 5

## Integrated Strategic ICT Roadmap



*Ikamva eliqaqambileyo!*



## 5. Integrated Strategic ICT Roadmap

The EC ICT Strategy comprises 7 broad strategic programmes. This section serves to describe these programmes and the initiatives that comprise them.

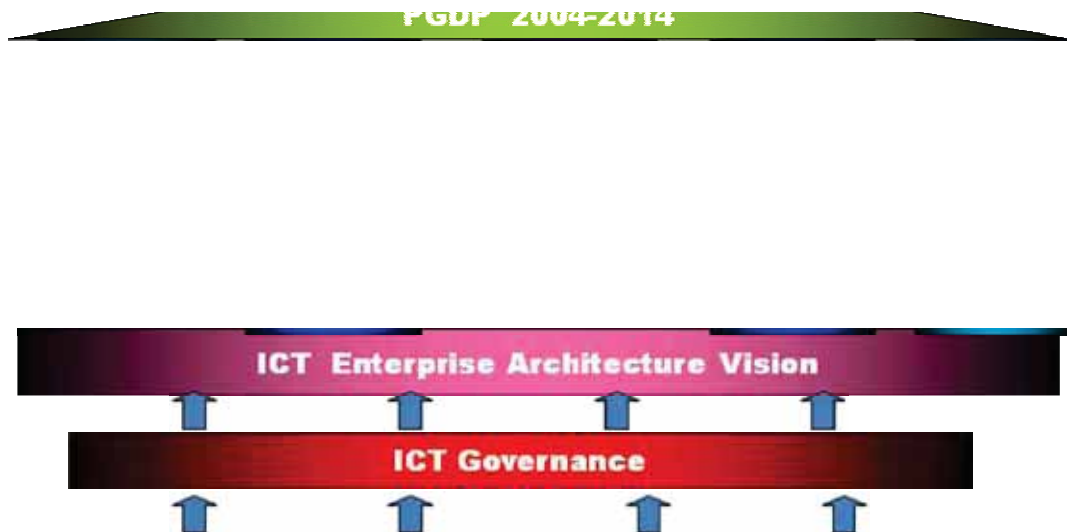


Figure 1: Strategic ICT Programmes

### 5.1 Programmes

This section provides a summary of each of the 7 strategic programmes identified to deliver the transformation of Provincial ICT. These initiatives have been designed based on the challenges facing the Eastern Cape Province as identified through a multi-stakeholder consultative process. The success of this strategy is dependent on focussed implementation and collaboration with all role players in both the public and private sector.

Provincial Mandate Support Projects (PGDP + PNC-ISAD + e-Govt + GWEA + PE Business Processes)

The PGDP is the key strategic document for the Eastern Cape. Thus it is imperative that the strategy goes some way towards addressing the goals identified. Though other ICT programmes will support this, the PGDP Support Programme consists of citizen-focused initiatives across various departments, aimed at specifically supporting the PGDP objectives. These programmes have a broad community or Provincial reach and are aimed at service delivery improvements and/or efficiencies in operations.

## 5.2 Programme 1: ICT Adoption and Usage

This programme focuses attention to the use of ICT to enhance both service delivery and the productivity within the public sector. The private sector already enjoys the benefits of using the ICT technologies to drive productivity.

### 5.2.1 Strategy 1: ICT as a Productivity Accelerator:

Development and convergence of ICT technologies creates opportunities to enhance productivity. The availability of mobile technologies provides clear opportunities for workforce mobilisation. Through the convergence of fixed and mobile technologies many organisations benefit from enhanced employee engagement as access to enterprise wide applications becomes possible wherever the employees are. These technologies are also relevant for public sector employees especially those working in communities. The key initiatives to drive usage of ICT technologies in the public sector include the following:-

- **Initiative: 1. Mobilisation of province-wide communication** covering voice, email and web portal collaboration;
- **Initiative: 2. Enterprise applications mobilisation and electronic transaction processing.** This entails making enterprise resource planning applications such as PERSAL, SAP and Oracle, Basic Accounting Systems (BAS) accessible wherever the employees are, exploiting the benefits of mobile technology availability; and
- **Initiative: 3. Business Intelligence (BI) Systems deployments** to provide internal monitoring and evaluation systems. Business intelligence provides organisations management with possibility to monitor and track performance of various business units and systems of the organisation. It provides an early warning system to the organisations management team should performance fall below expectations. These systems are widely used in the private sector as monitoring and evaluation tools. Listed below are examples of Business Intelligence Projects that are relevant to the public sector:
- **Design and Implement Poverty Alleviation System:** This initiative aims at implementing the Department of Social Development's Poverty Alleviation system (DIPSIS). The system serves as a single window for citizens to access all state poverty alleviation services. This system will register all state poverty intervention services into an electronic poverty basket, and allow citizens who interact with the system to have a preliminary assessment done and make electronic referrals to service:
  - **Providing departments.** The system will be rolled out to all local municipalities as a poverty intervention strategy by the poverty war room;
  - **Ward Based Planning Information System:** Introduction of a pervasive information system across all levels of government structures to enable the capture and collation of data to action and improve service delivery,

especially in rural areas. This solution will leverage broadband connectivity, web-based technology and GIS to enable usage of the system in rural wards and the immediate escalation of such data to the relevant government entities for appropriate attention;

- **Performance Management System Automation:** The organisational performance management is key for the attainment of government's priorities. Business intelligence systems deployments provide benefits for understanding bottlenecks in the service delivery pipeline. This initiative will include leveraging of the province's Geographical Information Systems (GIS) to provide compelling, visual representations of provincial progress in the realisation of government's priorities;
- **Medical Supplies Inventory Management Automation and tracking:** This project involves ensuring that all clinics use an electronic management system to issue dispensed drugs to the patients. Such system would through application of BI tools serve as an early warning system and for the outbreak of diseases; and
- **Initiative: 4. Public Sector ICT Change Management Programme:** To accelerate the adoption and use of ICT technologies in the public sector there is a need to implement a change management programme that will include training of the workforce to improve computer literacy levels. Key personnel will be trained on use of business intelligence systems in order to derive the benefits.
- **Initiative: 5. E-Government Systems deployments:**

*“Again, while communities commended Government’s efforts, saying lives are changing daily due to visible service delivery, they did not hesitate to over-emphasise the need for speed and urgency in the delivery of services.” – Dr S Muthwa, DG OTP,*

This programme of initiatives is directed at improving service delivery to citizens. This includes initiatives to manage programmes and projects as well as initiatives to improve channels of access between Government and citizens. Listed below are some of the projects to be undertaken to support the realisation of the e-Government initiative.

- **Initiative: 6. Design and Implement Project Management Office:** The Enterprise Programme Management Office (EPMO) mechanism is for analysis of project portfolio information, providing prioritisation, remediation and other recommendation. It also provides organisational focus on improving the management of projects, programs and portfolios. The benefits of implementing this initiative includes:
  - Enhanced understanding of Eastern Cape ICT investments and initiatives;
  - Improved ability to collaborate on initiatives between and amongst all levels of Eastern Cape Government, private sector and other stakeholders;

- Ability to report back to stakeholders regularly and accurately; and
- Ability to optimise ICT spending and cost, through re-use of existing assets and effective ICT management practices.
- **Initiative: 7. Develop Mechanism for Effective Handover of Initiatives:**  
The purpose of this initiative is to communicate early and frequently with stakeholders in communities where ECPG solutions are being deployed. It forms part of change and stakeholder management. This mechanism will enable the ECPG to:
  - Have an early understanding of Eastern Cape citizen expectations from initiatives;
  - Obtain buy-in for proposed initiatives;
  - Have access to community for usability testing of solutions; and
  - Mitigate the risk of change resistance.
- **Initiative: 8. Develop Common Messaging Service:**  
The purpose of this initiative is to facilitate the development of a common messaging platform for the delivery of information services to citizens in a usable format, through Government communication channels. This is particularly important in preparing for the 2010 Soccer World Cup where many tourists are expected in the Province who will need information from Provincial channels. The common messaging service will enable:
  - Each department to specify their target market and the content portion of platform, what that content will be, etc.; and
  - Scalable and manageable platform supporting multiple communication channel formats (SMS, fax, email, RSS, etc.).
- **Initiative: 9. Implement Single Number for Government:**  
The single number will be used to contact Government departments in the Eastern Cape. The initiative is the first step towards consolidation of services to enable seamless service delivery. The single number is important for the ECPG in that it will:
  - Provide a foundation for ECPG's transition to e-Government and realising the ethos of a single public service;
  - Increase quality of service to citizens through the use of an easy to remember number to get easy and prompt access to Government; and
  - Enabling infrastructure towards the establishment of a centralised ECPG call centre;
- **Initiative: 11. Deploy Self-service Access Points for Government Services:**  
The purpose of self-service access points is to provide internet access in strategic positions that allow citizens to access online Government services. This initiative will provide access to communications and Government information at the citizen's convenience;

- **Initiative: 12. Design and Deploy Business Process Automation Opportunities:**

The initiative aims to identify processes that can benefit from automation with the intent of improving productivity and service delivery in the Province through online services. A Business Process Automation (BPA) strategy will be developed to create foundations for next generation services (eServices) followed by the solution design and deployment;

- **Initiative: 13. Online Asset Management:** This initiative addresses the issue of a lack of a centralised solution to manage the Province's immovable assets. The National Department of Public Works has an online system that is planned to be rolled-out to the Provinces; however, the schedule has not been determined. The implementation of this initiative will:

- Improve the operational performance of asset investments;
- Reduce costs for asset maintenance;
- Implement Government Immovable Asset Management Act (GIAMA) compliant asset register; and
- Enable coordinated planning of maintenance for all immovable assets.

- **Initiative: 14. Develop Provincial ICT Marketing and Positioning Strategy:**

The purpose of the initiative is to develop a marketing strategy for IT in the Province. The strategy is aimed at delivering a strong marketing message that is able to promote the benefits of service transformation, thus facilitating the adoption rate of ICT Services.

## 5.2.2 Strategy 2: ICT for Service Delivery

This strategy focuses on leveraging the capabilities provided by the ICT to deliver services. The Eastern Cape Province is vastly rural and like many rural provinces it is faced with challenges such as shortage of medical personnel, long distances to travel between service centres and information gaps amongst its citizen. ICT capabilities have been identified to have the potential to close these gaps.

- **Initiative 1: ICT for Health:** Health is second biggest recipient of the provincial budgets following education. Providing health care in rural communities presents numerous challenges ranging from lack of medical personnel, logistics of drug management and early detection of outbreaks of diseases. The following projects have been identified as key projects that will unlock organisational performance in the delivery of the health care throughout the province.

- **Integrated Health Record (Patient Data Management System):** Establishment of single health record database is vital in management and tracking of disease. Integrated Health Record will enhance service delivery since all patient treatment record will be available throughout the province thus reducing the load of health personnel since the patient profiles will be

readily available and pre-assessments of patients will not always be necessary;

- **Disease Management System:** This entails the use of technology to address to workload put by chronic diseases such as the Diabetes and HIV/AIDS on the health care system. The pilots currently being undertaken in the Livingston Hospital with DMSA must be evaluated for possible large scale implementation;
- **Telemedicine:** Worldwide telemedicine deployments are complex to implement yet can deliver real benefits when well coordinated and executed. A number of private sector sponsored pilot initiatives have been implemented in the Eastern Cape, however none of them can be declared as outstanding success case studies. There is a need to develop a clear implementation framework for the telemedicine project as the benefits are obvious for the vastly rural province with shortage of medical personnel; and
- **Health Institutions' Connectivity:** To deliver any applications that will fast-track service delivery all the provincial health care institutions including clinics must have broadband connectivity with acceptable throughput speeds.
- **National Health Insurance:** This scheme will be introduced nationally in a phased and incremental manner as highlighted by His Excellency J G Zuma President of the Republic of South Africa during the joint sitting of the parliament, Cape Town 03 June 2009. This places an urgent imperative on our revitalisation program for District hospitals and clinics so that we are able to seamlessly integrate into the National program from a provincial perspective.
- **Initiative 2: ICT for Education:** ICT has become very important in the teaching and learning environment. ICT will create possibilities for schools to collaborate and share educational resources across vast distances. There are still disparities between private and public schools on the one hand and between urban and rural schools on the other in terms of access to ICT, yet all these schools are subjected to the same national curriculum statement. Unless we bridge the digital divide in an as far as education is concerned, we will create a new forms of educational inequalities for children born in a democracy. The following projects have been identified as a priority in the use of ICT for education.
  - **Eastern Cape Schools Connectivity programme:** All schools in the Eastern Cape must have broadband connectivity and computers within 3 year period;
  - **Implement E-Learning** strategy focusing on Educators and learners;
  - **Rollout extensive multi-level educator ICT training programme;** and
  - **Provide Laptops and Digital Teaching Aids to Educators for e-administration and teaching:**

- **Initiative 3: ICT for Agriculture:** This initiative addresses the needs of rural farmers who have little access to formal markets; this is one of the key drivers of the PGDP of transforming the agrarian economy. This initiative has the following projects benefits for the Province:
  - Links farmers to other farmers and to markets;
  - It puts in place a warning mechanism to warn farmers of potential dangers or threats e.g. foot and mouth disease;
  - The solution will provide information to the farmers in their home languages thus ensuring good understanding; and
  - Tracking of stock and thus preventing theft.
- **Initiative 4. Integrated Justice System:** Establish a common platform to integrate all service delivery transactions in the justice cluster to enhance efficiencies. The interaction between National Prosecuting Authority, the various courts, the South Africa Police Service, the Correctional Services and the Legal Aid Board must allow a seamless flow of information between the institutions;
- **Initiative 5: Joint Crime Command Centre:** A joint command centre for combating crime and SAPS workforce deployment must be developed. The Command centre must integrate all crime and violations combating units include traffic violations into a as single system that will ensure effectiveness. The System will use Location Information such as Geographical Information System (GIS) and Spatial Data Exchange (SDE) to track location of SAPS vehicles for deployment to the nearest crime report; and
- **Initiative 6: Integrated Housing Record:** Most recipients of the low-cost government housing tend to be nomadic and live in more than two cities. They tend to hand over their houses to their family members. It is critical develop an integrated record of recipients and those in the pipeline to receive new houses in order to ensure that there are no duplications. A searchable housing database that can be queried nationally must be developed.

### 5.2.3 Strategy 5: ICT Promotion:

To drive the mass adoption and use of ICT throughout the province there is a need for province-wide ICT promotion and positioning programme

- **Initiative 1:** Mass Media Campaign for all audiences;
- **Initiative 2:** Rollout of ICT Hubs and Resource Centre, (Thusong & Multipurpose) to provide access and experience and experimentation for the citizens;
- **Initiative 3:** Mobilise Funding to support Existing ICT promoting Initiatives in the provinces, such as the ICT Summit, The Eastern Cape ICT Initiative; and
- **Initiative 4:** Develop, Promote and support programmes that encourage the participation of women in the ICT sector.

#### 5.2.4 Strategy 6: Ensure that Eastern Cape Content is Available online

The internet has become a power engine and source of collaboration amongst the world community. Eastern Cape has a rich heritage history, however there is very little of it available on line. Moreover more content is being developed everyday and sadly it hardly makes its way to the internet. It is therefore important to develop strategies that will promote the heritage history of the Province.

- **Initiative 1: Develop and support a programme that will train community based website developer:** Unemployed young IT professionals will be retrained in website development and be issued with kits to development community based websites and serve as webmaster;
- **Initiative 2: Create websites for marketing products produced by community groups and entrepreneurs.** One of the challenges facing rural business development initiatives is access to market; the internet presents possibility for opening up the markets; and
- **Initiative 3: Develop and post content in Xhosa:** IsiXhosa is the dominant language of the Eastern Cape, it is therefore important to provide part of the content on the web in IsiXhosa. An IsiXhosa content website will be launched and promoted as research portal on literature.

#### 5.3 Programme 2: ICT Sector Development and Innovation

*“In line with our undertakings, we have to forge ahead to promote a more inclusive economy. In this regard, we will utilise state levers such as procurement, licensing and financial support to assist small medium enterprises, as well as to promote the implementation of Broad-Based Black Economic Empowerment and affirmative action policies. We will reduce the regulatory burden on small businesses The matter of being stifled by regulations has been raised by the sector several times.*

*In another intervention to create an enabling environment for investment, government will move towards a single integrated business registration system.*

- ***His Excellency J G Zuma, President of the Republic of South Africa***

*In his State of the Nation address, 03 June 2009*

This programmes deals with creation of a robust and vibrant ICT sector with strong leadership and commitment from all participants and stakeholders. It deals with strategies for development and rollout of systems of innovation in the province. This programme also deals with strategies to accelerate entry of SMMEs especially women owned enterprises in the sector.

### 5.3.1 Strategy 1: Accelerate SMME Development and Participation in the ICT Sector

SMMEs play a crucial role in the provincial economy. Special measures that will accelerate participation of SMMEs especially women owned enterprises in the ICT sector must be developed. These will include deliberate preferential ICT procurement by government to stimulate participation of these enterprises.

There is a need to increase use of ICT as an enabler for socio-economic development, with equity. The intent is to stimulate ICT-enabled growth of business across the economy. In this regard the adoption of ICTs in enabled sectors will help to increase overall employment through the use of ICTs. In this regard, the aim is to specifically address equity issues with regard to gender, disadvantaged groups and those in rural and under-served communities. Key indicators for measuring progress in achieving this goal are:

- ICT investment as a percentage of Provincial GDP; and
- Overall ICT investment in the provincial economy as a whole.

Establishing Governmental support mechanisms for ICT entrepreneurship is vital towards contributing to the economy of the Province. This programme consists of two initiatives:

- **Initiative 1: Develop targeted procurement framework to grow ICT SMME supply:** This initiative focuses on activities that promote the use of SMMEs and youths in the ICT economy. This initiative will also focus on formalising the registering of SMMEs with SITA, on creating a centralised Provincial website for SMMEs and youths and on ensuring that SMMEs are involved in work with large service providers; and
- **Initiative 2: Establish framework to communicate ICT opportunities for SMMEs:** This initiative focuses on activities that assist SMMEs and youths in the ICT economy. These activities will help to develop sustainable business skills and facilitate collaboration between large enterprises and SMMEs for subcontracting opportunities. This initiative is aimed at managing the quality of SMMEs.

### 5.3.2 Strategy 2: Bridging the Gender Digital Divide

Eastern Cape Government is committed to ensuring that particularly poor women are not excluded from the benefits of ICTs. The cost of exclusion is too high. Those who remain excluded from the digital revolution will also be excluded from an increasingly globalised and IT-based job, trade and production market, thereby missing out on many possibilities to enhance their economic security and contribute to the overall development of their communities and the region.

ICTs have the potential to help women increase their productivity and efficiency, building on their existing income-generating activities and enabling them to access new employment and entrepreneurship opportunities in the information economy. To bridge the gender digital divide, capital is needed not only financial, but also intellectual capital. The major barriers we have to overcome are not technological but human they depend on the political will and commitment to facilitate women's access not only to e-mail, e-commerce and e-jobs, but to "E-quality."

The following projects have been identified:

- **Initiative 1:** A strategy to support Woman ICT companies;
- **Initiative 2: A strategy to attract Rural Girls to study ICTs.** For example, Organise a grant for five students at Eastern Cape university to pursue an ICT Degree with a provision to be placed within a company /department on completion); and
- **Initiative 3: Start a Regional Woman ICT Academy programme.** The programme's goal is to educate women in ICT, improve their business skills and increase women's overall professional productivity.

### **5.3.3 Strategy 3: Promote Province-wide ICT Technology Innovation Strategy**

Provinces do not have ministries or departments that deal with Science and Technology. Many institutions of innovation Technology Research are located in Gauteng and carry national mandate. This creates gaps and inadequacies in developing and driving provincial systems of innovation. There is a need to develop strategies that will develop these systems of innovation especially for ICT. The following initiatives have been identified as priority:

- **Initiative 1:** Create a province-wide culture that encourages ICT Innovation;
- **Initiative 2:** Promote ICT innovation Awareness; and
- **Initiative 3:** Create a special unit focusing on driving Technology Innovation throughout the Eastern Cape.

### **5.3.4 Strategy 4: Promote Investment in the ICT sector as well as stimulate ICT Services Export**

Eastern Cape has to attract major ICT players to invest in the ICT sector in order to stimulate the economy and create jobs. It is equally important for the province to take advantage of the business process outsourcing and off shoring opportunities especially in the Call centre environment. The call centre industry has been highlighted as one of the Apex priorities. The following initiatives have been identified as priority to give purpose to the development of the ICT industry.

- **Initiative 1:** Consolidate existing public call centre services to drive efficiencies and explore possibilities of public private partnerships to stimulate the call centre industry growth;
- **Initiative 2:** Develop and package incentives to attract ICT investment in the Eastern Cape :e.g. ICT Development Zones; and
- **Initiative 3:** Conclude partnership agreements with labour with a view to achieve increased labour flexibility as part of the strategy to attract call centre traffic to terminate in the Eastern Cape.
- **Initiative 4:** Forge linkages with other innovation initiatives:
  - National Research and Technology Foresight Project;
  - Council for Scientific and Industrial Research (CSIR);
  - Department of Science and Technology Innovation fund;
  - Meraka Institute;
  - Science & Technology Parks;
  - Linkages between academia, industry, public and private sectors;
  - International innovation linkages taking advantage of bilateral agreements ( e.g. Finland);
  - Support ICT Research and Development in Universities; and
  - Establish ICT innovation Centres in the province.

### 5.3.5 Strategy 5: Establish an Eastern Cape ICT Development Review Panel

To ensure shared accountability for the growth and development of the province's ICT sector, it is proposed that a multi-stakeholder panel be established to contribute to the attainment of identified objectives for the development of the ICT industry in the Eastern Cape. It is envisaged that the panel will involve the public sector, private sector representatives of civic society as well as academic institutions. The role of the panel will be to review progress of strategy implementation and propose alternative strategies that will deliver value to the province.

## 5.4 Programme 3: ICT Governance

*“Given the demand for such skills, I am particularly interested in partnering with the private sector to develop innovative options for increasing our ability to respond to such demands.” –*

*Naledi Pandor, 19 March 2007*

ICT Governance structures relationships and process to direct and control the enterprise in order to achieve the enterprise's goals by adding value while balancing risk versus return over Information Technology (IT) and its processes (CobiT). Thus, this Programme of initiatives is aimed at improving Provincial ICT Governance, transparency and accountability between tiers of Government, Government departments and with external stakeholders. This programme will also evaluate departmental structures for improvements.

#### **5.4.1 Strategy 1: Design and Implement Provincial ICT Governance Protocol**

The purpose of this strategy is to define the Provincial ICT Governance which will include National, Provincial and Local Government as well as citizens, strategic partners and other stakeholders. In addition, the strategy reviews how IT is positioned within the Provincial departments to ensure maximum authority to deliver value. The initiative will be subject to Government Policy, including inter-alia the Intergovernmental Relations Framework Act [No 13 of 2005], the Public Service Act, 1994 (Proclamation No. 103 of 1994) and the Public Service Act, 1994. This initiative is key to giving impetus to the realisation of the initiatives contained within this strategy. Expected benefits of this initiative include:

- Provision of a clear direction for initiatives and activities;
- Accountability and escalation procedures for decisions;
- Prioritisation of initiatives according to Provincial and departmental priorities; and
- Foster alignment of business and ICT.

#### **5.4.2 Strategy 2: Form Industry Specific ICT Forums**

The purpose of this initiative is to form ICT forums that are focused on specific industries. The working group would be responsible for identifying the building blocks necessary for service transformation, including targeting messages to client segments. These forums will enable the Provincial Government to:

- Respond to the need of efficient and effective service delivery;
- Have access to industry subject matter experts and scarce skills; and
- Plan initiatives for supporting economic development and socio-economic growth with ICT.

#### **5.5 Programme 4: ICT Enterprise Architecture**

*"...as we move toward Inclusive Information Society – empowering people by giving information to learn how they can do things better and share their experience with others and having a true feeling of being part of the whole country so we can build social cohesion." –*

*Department of Communications, 10 April 2008*

**'Indeed, the creation of an inclusive and development-oriented Information Society is in the best interests of the majority of humanity, because most of the peoples of the world, especially from the developing countries, are confronted by the challenge of exclusion in the context of the global economy, in whose development modern information and communications technologies (ICTs) play a vital role' –**

*President of South Africa addressing World Summit on the Information Society (WSIS) in Tunisia in November 2005.*

The capacity to make informed decisions is key to delivering the services needed by citizens. Thus this Business Intelligence programme of initiatives is directed towards improving access to data for decision-making. The data will enable the Province to move towards a more inclusive Information Society. This will also support online services aimed directly at citizens through access to structured data.

### **5.5.1 Strategy 1: Rollout managed migration towards electronic transaction processing and paperless environment**

- **Initiative 1: Develop and Validate Enterprise Architecture:** The initiative is aimed at defining and establishing a Province-wide Enterprise Architecture (EA) framework (e.g. operating model, key processes ) and validating its effectiveness through an initial pilot focused on one department with the following benefits:
  - The execution capability of Provincial ICT projects will be easier to manage and decisions will be made with a clear vision of the whole Province; and
  - A solid EA capability can result in cost reduction benefits for the Province where there is duplication of applications, information and processes.
- **Initiative 2: Design and Implement Identity and Access Management:** The purpose of this initiative is to create a shared identity that enables access to transversal Provincial applications information and resources and is intended to address challenges relating to information access in the Province;
- **Initiative 3: Portal Strategy and Foundation:** The initiative encompasses activities geared at developing a consolidated Provincial portal strategy and building on its portal foundations to provide improved service delivery to internal and external stakeholders in the Province;
- **Initiative 4: Design and Implement Workflow and Document Management:** The purpose of this initiative is to rationalise and consolidate the number of document management applications that exist within the Province in an effort to enable consistent management of critical documents and improve productivity; and
- **Initiative 5: Develop Integrated View of Provincial Information (IVPI):** This initiative is aimed at establishing an integrated view of Provincial information through the development of Data warehouse and Business Intelligence capabilities as well as providing a single version of the GIS. The initiative has the following potential benefits:

- Cost reduction potential as disparate duplicate source systems are retired and consolidated into a single platform;
- Enables rapid decision making and improves service delivery with consistent and reliable information; and
- Simplified Information Management architecture for the Province can assist with agriculture enablement efforts (messaging platform can be integrated with farmer information data stores to enable content push to their mobiles).

## 5.6 Programme 5: Human Resource Development in the ICT Sector

The issue of skills within the Province is an important area to be addressed. This is a priority both at a National level as well as in the Eastern Cape PGDP and ICT must be used to expand the skills base to support other initiatives.

The Human Resource Development (HRD) Programme of initiatives is aimed at improving ICT skills in the Province. The programme focuses on expanding the partnership with Eastern Cape universities, using international ICT exchange programmes and more focused internships to expand the skills base as well as aligning the curricula of tertiary institutions with the industry needs.

The HRD Programme is made up of the following initiatives:

### 5.6.1 Strategy 1: Promotion of ICT-Aligned Curricula at school level

- **Initiative 1:** Collaborate with the Department of Education to contribute towards the promotion of ICT-Aligned courses at a school level. This collaboration is intended to provide a feeder system for increased participation by learners in the short and medium term in the ICT industry. This initiative will focus on the promotion of electronics, computer services and computer hardware as courses within school level curricula. Increased focus will also be placed on Mathematics and Science, both providing a platform for the development of future ICT professionals.
- **Initiative 2: Mainstream ICT Education throughout all schools.** This means that all learning must be done using ICT as collaboration and learning platform.

### 5.6.2 Strategy 2: Engage Tertiary institutions to Drive ICT education

- **Initiative 1: Ensure alignment of curriculum with industry skills expectations.** Hold quarterly engagement with Tertiary Institutions subject advisory boards and ensure that there is industry participation;
- **Initiative 2:** Provide bursaries to ICT students in order to ensure high subscription. Promote ICT learning area as preferred choice in order to drive demand;

- **Initiative 3: Allocate funding to Universities to stimulate ICT research.** Increase Funding for Applied Research in institutions of Higher Learning; and
- **Initiative 4:** Improve Quality and quantity of ICT Graduates coming out of tertiary institutions.

### 5.6.3 Strategy 3: Develop strategies for lifelong Learning

- **Initiative 1. Develop and Implement ICT Skills Exchange Programme and Formalise Internships:** The purpose of this initiative is to develop a programme to facilitate experiential training through the engagement of private sector and academic institutions locally and internationally to:
  - Enable the fast tracking of professional development & work experience and establish long term graduate placement strategies.
- **Initiative 2: Develop Leadership Programmes to enhance EC ICT skills:**  
This initiative addresses the issue of a lack of ICT skills among management and senior management in the Province. The aim is to develop and equip them with the skills to make material contribution regarding ICT in the Province.
- This will give senior management powerful leverage to align executive behaviour with business values and objectives in the quest for superior financial performance in the economy;
- **Initiative 3: Ring-fence Government Bursaries for EC ICT Students:** The ring-fencing initiative is aimed at ICT skills retention in the Province through bursaries awarded to top achievers and previously disadvantaged students especially those in need of financial assistance;
- **Initiative 4: Facilitate Implementation of ICT enabled learning with FET colleges:** This is teaching and learning that is web-enabled to learners/students. The learning is self paced & self directed, allowing students to choose content & tools appropriate to their different interests, needs and skills levels;
- **Initiative 5: eLearning:** The initiative comprises of two eLearning initiatives (Deliver teaching aids and lesson content to schools using ICT and Webcasting to FETs and Thusong Centres) aimed at improving the teacher's delivery of a lesson rather than removing the teacher; and
- **Initiative 8: End-user/citizen ICT literacy:** This initiative focuses on activities that enable citizens and other users of ICT (e.g. Government employees) in the province to be proficient in the use of ICT through targeted skills development programmes.

### 5.7 Programme 6: ICT Connectivity Infrastructure (“Connect the Eastern Cape”)

*“... the development of later technologies such as wireless and mobile broadband is assuming greater importance. These technologies have had some advantages in that they are able to be deployed much more easily to rural and disadvantaged areas. If Government promotes and incentivises their deployment in these areas, this will improve uptake and usage among people and areas that have thus far been excluded.” –*

*Late Dr Ivy Matsepe-Casaburri, 3 June 2008*

ICT infrastructure is the backbone of any innovation in the ICT industry. It is the foundation for all applications through which various services are delivered. Technology diffusion tends to follow GDP per capita which means that those communities that with lower GDP per capita will lag in terms of access to technology. The market forces respond with great elasticity to the self interest of the customers or consumers who are able to buy these services and remain unresponsive to those who do not have the power to purchase the services. Investors require a return on their investment hence the primary focus on those who can afford the services. The centrality of the role of government in technology diffusion can never be over emphasised. Government has institutions that are spread throughout the province in rural areas. These institutions have a great need for ICT services however government adoption of ICT tends to lag the industry by far.

Should government adopt the use of ICTs and rollout those services throughout its distributed institutions, rural communities would benefit from such rollout as the business case for infrastructure rollout would improve and the markets would start responding to the signalling stimuli.

#### **5.7.1 Strategy 1: Encourage private sector investment in ICT infrastructure**

- **Initiative 1: Engage ICT players to rollout broadband infrastructure throughout the province.** Such engagement must also take into account that investors require a return on their investment and therefore government’s commitment to adoption and use of ICT technologies thorough out its institutions must be clarified; and
- **Initiative 2:** Establish a consultative engagement forum with ICT infrastructure providers.

#### **5.8 Programme 7: 2010 Support Projects**

*“One of the biggest infrastructure investment projects is in the 2010 FIFA Soccer World Cup. We have as government and the nation at large, pledged that the World Cup will leave a proud legacy from which Our children and our communities will benefit for many years to come.”*

**- His Excellency J G Zuma, President of the Republic of South Africa**

*In his State of the Nation address, 03 June 2009*

These initiatives are focused on supporting the upcoming 2010 Soccer World Cup. The initiatives are sustainable and will aid the Province well after 2010. The 2010 Support Projects programme consists of the following:

**5.8.1 Strategy 1: Online Tourism Booking and Information Tool.** This initiative is the development of an online booking tool for travel and tourism service provider in the EC. This initiative will be particularly pertinent for the 2010 World Cup to enable tourists to a centralised database of the Province's accommodation and travel services. This initiative will use provincial spatial data and GIS systems to provide inter-alia interactive maps and direction services to Bed and Breakfasts, Point of Interest and Stadiums.

**5.8.2 Strategy 2: Implement Single Number for 2010:** This initiative will be in place before the Government Single Number, the purpose of this initiative is to centralise all 2010 related queries to a single number. The same specifications defined for the Government single number will be deployed; in fact, the Government single number will build on the foundations of the 2010 number.

This solution will incorporate other Provincial initiatives such as the single number solution planned by the Department of Safety.

**5.9 Programme 8: Shared Services and Business Process Outsourcing**

This programme focuses on improving service delivery by:

1. Consolidating previously disparate ICT functions to allow for provision of higher service levels and greater responsiveness while lowering costs.
2. Enable the province to refocus its internal staff on its core business functions while leveraging on expert and efficient service provision on non-core functions from outsourcing partners.

**5.9.1 Strategy 1: Shared Services**

The shared services model is not new to government as the transversal systems and the Government Common Core Network are already being provided to all government departments (national and Provincial). The emphasis for this strategy is on provision of provincial shared services. The major benefits are reduced costs of service delivery and ability to release resources to provide better services at the front line.

**Initiative 1: Visioning and planning:** The purpose of initiative is to determine the current provincial ICT landscape as well as what it should look like in a shared situation. Because government departments are not built exactly alike, the following should be taken into consideration:

- Consult widely to establish shared vision
- Varying requirements that must be considered and balanced when implementing a shared services strategy.
- Align agreed vision to business strategic objectives
- Agree on governance and performance monitoring model
- Retain certain elements and applications from the existing infrastructure and complement them with appropriate shared services products and processes.
- Identify and quantify risks
- Incremental implementation.

**Initiative 2: Design and Implement Shared Services:** The purpose of this initiative is to develop and implement a shared service that enables access to transversal provincial services.

- The information gathered during visioning and planning is plotted into a series of detailed projects required to manifest the desired ICT Shared Services model. Setup governance structures
- Develop Risk and Change Management Plans
- Develop transformation programme
- Select, prioritise and implement planned projects
- Transition to on-going operations coupled with performance monitoring.

### **5.9.2 Strategy 2: Business Process Outsourcing**

The services outsourcing model is not new to government as ICT procurement is outsourced to SITA. The emphasis for this strategy is on ICT facilitating services such as desktop environment maintenance, call centre management, etc. This model provides for non-core business functions being performed efficiently by an outsourcing partner, while the core functions are efficiently carried out in-house while also benefiting on expert and skilled services from the partner.

The driving force behind this decision is typically cost reduction and organizational restructuring.

- **Initiative 1: Making the Decision:** The decision should be based on a solid understanding of departmental performance. Having quantifiable baseline data allows for entering into an outsourcing venture knowing the objectives to be achieved, the anticipated benefits and the metrics required to measure and manage the contract
- **Initiative 2: Establishing the Baseline:** A quality and productivity baseline ensures that the contract basis is a fair representation of the historical performance. The baseline data should include: function points; financial and level of effort data; project attributes; problems and defects; and user satisfaction. The analysis of this data will provide valuable information to both parties including: productivity rates; quality statistics; maintenance requirements; and improvement opportunities.
- **Initiative 3: Managing and Validating the Relationship:** Maintaining a healthy Customer/Vendor relationship requires an ongoing process to be established. These processes should provide assurances to the customer that they are receiving the appropriate services as contracted from the vendor. The processes required to track performance, communicate status and document results include.
  - Systems Methodology and techniques Development
  - Project management techniques
  - Accounting/Budgeting process
  - Deliverables Measurement

The use of metrics in outsourcing contracts eliminate much of the up-front ambiguity but there still a need to validate the performance of the vendor against the agreement.

Actual performance and variances should be documented along with specific recommendations designed to improve adherence to contract requirements. Critical to this process is the ongoing validation and auditing of performance data.

## 5.10 Alignment to Strategic Objectives

The ICT sector is still undergoing transformations to address imbalances of the past. While some progress has been made in the country as a whole, this has not been adequate. The ECPG has a responsibility to citizens and other stakeholders to address the challenges facing the Province of poverty, service delivery, skills development, dependence on farming and access to information and communications. This section provides a review of the programmes against the Provincial and National strategic objectives.

## 5.11 Alignment to PGDG

In order to ensure that the initiatives satisfy the Provincial requirements, they were mapped against the PGDP goals.

|                      |   | 1. Access Infrastructure | 2. PGDP Support Projects | 3. Human Resource Development | 4. SMME Support | 5. Business Intelligence | 6. ICT Governance | 7. Service Delivery | 8. Investment in ICT Industry | 9. 2010 Support Projects |
|----------------------|---|--------------------------|--------------------------|-------------------------------|-----------------|--------------------------|-------------------|---------------------|-------------------------------|--------------------------|
| PGDP Programme Areas | Poverty Alleviation                       | √                        | √                        | √                             | √               | √                        | √                 | √                   | √                             | √                        |
|                      | Agrarian Transformation                   | √                        | √                        | √                             |                 | √                        |                   |                     |                               |                          |
|                      | Manufacturing Diversification and Tourism | √                        |                          |                               |                 | √                        |                   | √                   |                               | √                        |
|                      | Infrastructure Development                | √                        | √                        | √                             |                 | √                        | √                 | √                   | √                             | √                        |
|                      | Human Resource Development                | √                        | √                        | √                             | √               | √                        | √                 | √                   | √                             |                          |
|                      | Public Sector Transformation              | √                        | √                        | √                             |                 | √                        | √                 | √                   | √                             | √                        |

Table 1: Alignment of ICT Strategy Programmes to PGDP

## 5.12 ECPG ICT as an Enabler of the Apex Priorities

For the ECPG, ICT presents enormous opportunities to enable not only the PGDP objectives but to support the broader National Apex priorities. A number of key targeted change programmes have been defined to address key issues by 2014. The ICT change programmes have been structured into broader building blocks of that need to be executed to address ICT in the Eastern Cape.

The ICT change programmes are aligned to the objectives / goals of the PGDP and are also aligned to the Country's Apex priorities. This alignment is critical as it demonstrates the ECPG's ICT as a vital enabler of not only the Province's strategic drivers but also those of the Country. The ECPG ICT Strategy is aligned to 12 of the 24 Apex priorities as shown in the next page:

|  |   | 1. Access Infrastructure | 2. PGDP Support Projects | 3. Human Resource Development | 4. SMME Support | 5. Business Intelligence | 6. ICT Governance | 7. Service Delivery | 8. Investment in ICT Industry | 9. 2010 Support Projects |
|--|---|--------------------------|--------------------------|-------------------------------|-----------------|--------------------------|-------------------|---------------------|-------------------------------|--------------------------|
| <b>Apex Priority Areas Being Addressed</b> | Implement Industrial Policy Action Plan                                     |                          | √                        |                               |                 |                          |                   |                     |                               | √                        |
|  | Set up Investment call centre   |                          |                          |                               |                 |                          |                   | √                   |                               | √                        |
|  | Seed up ICT interventions to provide cheap platforms                        | √                        |                          |                               |                 | √                        |                   |                     |                               |                          |
|  | Implement intensive energy security campaign                                | √                        |                          | √                             |                 | √                        |                   |                     |                               |                          |
|  | Resolve Organisational issues on skills development                         |                          |                          | √                             |                 |                          |                   |                     |                               |                          |
|  | Resource poor schools and monitor learning outcomes                         |                          | √                        | √                             |                 |                          |                   |                     |                               |                          |
|  | Speed up land and agrarian reform   | √                        | √                        |                               |                 |                          |                   |                     |                               |                          |
|  | War Against Poverty   | √                        | √                        | √                             | √               | √                        | √                 | √                   | √                             | √                        |
|  | Self-employment Interventions in the second economy                         |                          |                          | √                             | √               |                          |                   |                     | √                             |                          |
|  | Speed up community infrastructure programme                                 | √                        |                          | √                             |                 |                          |                   |                     |                               |                          |
|  | Ratchet up implementation of ECD (Early Child Dev.) or Pre-School Programme |                          |                          | √                             |                 |                          |                   |                     |                               |                          |
|  | Assistance to SMMEs including procurement activities by Government          |                          |                          | √                             | √               |                          |                   |                     |                               |                          |

Table 2: Alignment of ICT Strategy to Apex Priorities

\* Source: <http://www.info.gov.za/otherdocs/2008/apex-priorities0208.pdf>

## 5.13 Integrated ICT Roadmap

This integrated roadmap indicates the proposed initiatives schedule for acting on the ICT strategy. The roadmap initiatives are scheduled according to:

- The initiative being a foundation item for the delivery of subsequent strategic initiatives;
- Priority items with a specific end date e.g. the 2010 Soccer World Cup requires ICT to be in place before the start of the tournament;
- The logical flow of initiatives due to dependencies and constraints and integration with National initiatives;
- The current ICT initiatives currently planned or being executed within the Province; and
- Though much of the activity is within the first 3 years till 2011, much will need to be done to 2014 and beyond to ensure a strong ICT competence in the Province.

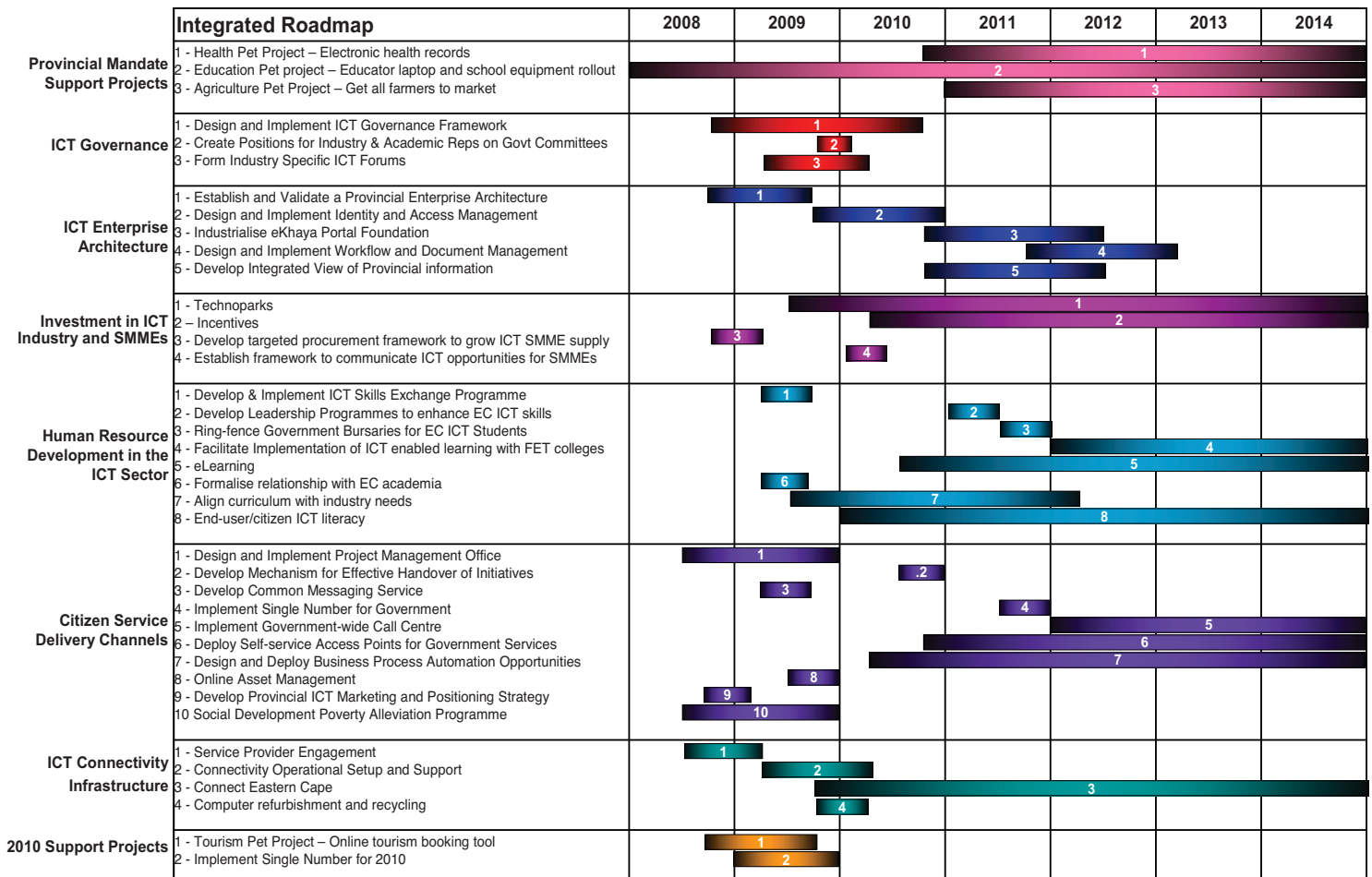


Figure 2: Integrated Strategic Roadmap

With the objective of supporting the SPF – Strategic Priorities Framework, the PGITO Programme of Action has listed the initiatives aligned to the eight strategic priorities.

| Programs                         | Initiatives   | Economic Growth, Decent Work, sustainable livelihood                       | Build Social and Economic Infrastructure | Rural Development, Agrarian reform | Education, Skills, Human Resources | Improve Health Profile | Crime & Corruption | Developmental State, improve public service, democratic institution | Cohesive Caring Sustainable Communities |   |
|----------------------------------|---|--|--|------------------------------------|------------------------------------|------------------------|--------------------|---|---|---|
|                                  |   |  |  |                                    |                                    |                        |                    |   |   |   |
| Foundational Programs            | Infrastructure  | Business Intelligence Systems  | X  | X                                  | X                                  | X                      | X                  | X   |   |   |
|                                  |   | Develop Integrated view of Provincial Information                          |  |                                    | X                                  | X                      | X                  | X   |   |   |
|                                  |   | Engage ICT players to roll out broadband in the province                   |  | X                                  | X                                  | X                      |                    |   | X                                       | X |
|                                  |   | Design and Implement Identity and Access Management                        |  |                                    |                                    |                        |                    |   | X                                       |   |
|                                  |   | ICT Infrastructure Consolidation (Data Centre, Servers etc.)               |  |                                    |                                    |                        |                    |   | X                                       |   |
|                                  |   | Upgrade Connectivity to Provincial Govt. Sites (Bhisho Campus & Districts) |  |                                    |                                    |                        |                    |   | X                                       |   |
|                                  |   | Provincial Disaster Recovery Plan & Implementation                         |  |                                    |                                    |                        |                    |   |   |   |
|                                  | Governance  | Provincial Hardware Infrastructure Revamp                                  | X  |                                    |                                    |                        |                    |   | X                                       |   |
|                                  |   | Design and Implement PMO   |  |                                    |                                    |                        |                    |   |   |   |
|                                  |   | Design & Implement Provincial ICT Governance Protocol                      |  |                                    |                                    |                        |                    | X   | X                                       |   |
|                                  |   | Visioning & Planning Shared Services                                       |  | X                                  |                                    |                        |                    |   | X                                       |   |
|                                  |   | Public Sector ICT Change Management  |  |                                    |                                    |                        |                    |   | X                                       |   |
|                                  | Develop & Validate Enterprise Architecture                              |  |  |                                    |                                    |                        |                    | X   |   |   |
| Service Delivery Enhancement     | Health Institution Connectivity Hospitals, Clinics, Health Centres etc. |  |  |                                    |                                    |                        |                    | X   |   |   |
|                                  | Patient Data Management   |  |  |                                    |                                    | X                      |                    | X   |   |   |
|                                  | Establish Premier's ICT Advisory Council                                |  | X  |                                    |                                    |                        |                    | X   |   |   |
|                                  | Government Wide Call Centre   |  |  |                                    |                                    |                        |                    | X   |   |   |
|                                  | Single Number for EC Government   |  |  | X                                  |                                    |                        |                    | X   |   |   |
|                                  | Deploy Self Service Access points for Government Services               |  |  | X                                  |                                    |                        |                    | X   | X                                       |   |
| Economic Development             | Youth eCooperatives (Community Based website & eMarketing Initiatives)  | X  |  | X                                  | X                                  |                        |                    | X   | X                                       |   |
|                                  | Linking Farmers and Markets with information                            | X  | X  | X                                  |                                    |                        |                    |   | X                                       |   |
|                                  | Promote ICT Innovation awareness  | X  |  |                                    | X                                  |                        |                    |   |   |   |
|                                  | Consolidate existing public call centres and explore PPPs (BPOs)        | X  |  |                                    |                                    |                        |                    | X   |   |   |
| Education & Capacity Development | Educator ICT Literacy   | X  |  | X                                  | X                                  |                        |                    |   | X                                       |   |
|                                  | Schools Connectivity Programme  |  | X  |                                    | X                                  |                        |                    | X   |   |   |
|                                  | Laptops and Digital teaching aids for educators                         |  |  |                                    | X                                  |                        |                    | X   | X                                       |   |
|                                  | Mainstream ICT education through all schools                            | X  |  |                                    | X                                  |                        |                    | X   |   |   |
|                                  | Facilitate Implementation of ICT enabled learning with FET colleges     | X  |  |                                    | X                                  |                        |                    | X   |   |   |
|                                  | ICT hubs and Resource centres   |  | X  |                                    | X                                  |                        |                    | X   | X                                       |   |

Figure 3: Prioritised PGITO Implementation Plan 2010 - 2014

The cost estimates for the above initiatives are shown in the following page.

| Estimated Budget in 000' Rands                                      |               |               |               |               |               |               |
|---|---------------|---------------|---------------|---------------|---------------|---------------|
| Initiative  | Capex         |               |               | Opex          |               |               |
|   | Rands         | Rands         | Rands         | Rands         | Rands         | Rands         |
|   | Y1            | Y2            | Y3            | Y1            | Y2            | Y3            |
| 1 Business Intelligence Sys   | 3500          | 5000          | 1000          | 1500          | 2000          | 2500          |
| 2 Integrated view of Provincial Info                                | 3500          | 5000          | 1000          | 1500          | 2000          | 2500          |
| 3 Engage ICT Players to Roll out Broad band in Province             | 40000         | 50000         | 50000         | 4000          | 5000          | 5000          |
| 4 Design and Implement Identity and Access management               | 30000         | 40000         | 50000         | 3000          | 4000          | 5000          |
| 5 ICT Infrastructure consolidation                                  | 25000         | 20000         | 15000         | 4000          | 3000          | 2500          |
| 6 Upgrade connectivity to Provincial govt. sites (H.O & districts)  |               |               |               |               |               |               |
| 7 Provincial Disaster Recovery plan & implementation                | 10000         | 15000         | 15000         | 2000          | 2500          | 2500          |
| 8 Provincial Hardware Infrastructure revamp                         | 50000         | 75000         | 50000         | 5000          | 7500          | 5000          |
| 9 Design and implement PMO  | 1000          | 1500          | 2500          | 10000         | 15000         | 15000         |
| 10 Design and implement Provincial ICT Governance Protocol          |               |               |               | 1000          | 1500          | 1500          |
| 11 Visioning and Planning Shared Services                           |               |               |               | 2500          | 3000          | 5000          |
| 12 Public sector ICT change management                              | 1000          | 1500          | 2500          | 10000         | 15000         | 15000         |
| 13 Develop and Validate Enterprise Architecture                     | 1000          | 1000          | 1000          | 5000          | 5000          | 5500          |
|   |               |               |               |               |               |               |
| 14 Health Institution Connectivity Hospitals, Clinics, Care centres |               |               |               |               |               |               |
| 15 Patient Data management  | 100000        | 150000        | 250000        | 10000         | 15000         | 25000         |
| 16 Establish Premier's ICT Advisory Council                         |               |               |               | 2000          | 2500          | 3000          |
| 17 Government wide Call center                                      | 5000          | 10000         | 15000         | 5000          | 5000          | 7000          |
| 18 Single number for EC Government                                  |               |               |               | 2500          | 4000          | 5000          |
| 19 Deploy self service access points for government services        |               |               |               |               |               |               |
|   |               |               |               |               |               |               |
| 20 Youth eCooperatives(community based website & eMarketing)        | 2500          | 4000          | 5000          | 2500          | 4000          | 5000          |
| 21 Linking Farmers and markets with information                     | 6000          | 10000         | 15000         | 4000          | 5000          | 5000          |
| 22 Promote ICT innovation awareness                                 |               |               |               | 1000          | 2000          | 3000          |
| 23 Consolidate existing public call centers & explore PPPS/BPO      | 2000          | 3000          | 5000          | 2000          | 3000          | 5000          |
|   |               |               |               |               |               |               |
| 24 Educator ICT literacy  | 1000          | 2000          | 3000          | 5000          | 7500          | 10000         |
| 25 Schools connectivity program                                     |               |               |               |               |               |               |
| 26 Laptops & Digital teaching aids for educators                    | 100000        | 150000        | 250000        | 30000         | 45000         | 50000         |
| 27 Mainstream ICT education through all schools                     |               |               |               |               |               |               |
| 28 Facilitate implementation of ICT enabled learning with FET       | 20000         | 30000         | 50000         | 2000          | 3000          | 5000          |
| 29 ICT Hubs and Resource centers                                    |               |               |               |               |               |               |
|   | <b>401500</b> | <b>573000</b> | <b>781000</b> | <b>115500</b> | <b>161500</b> | <b>190000</b> |

Figure 4: Cost Estimates for the Implementation Plan.

# 6

## Critical Success Factors for ICT Change



*Ikamva eliqaqambileyo!*



## 6. Critical Success Factors for ICT Change

An ICT Strategy is not just about the ICT department – it also impacts a wide range of enterprise stakeholders who rely on ICT in order to meet their goals and objectives. The success of the ICT Strategy implementation is therefore dependent on the participation of all these stakeholders with a common understanding and vision for ICT enabled service delivery in the Province.

Imperative to the successful ICT transformation in the Eastern Cape Province are the following considerations:

- Recognition of the need for collaboration with all relevant stakeholders;
- Recognition of the need for greater commitment from senior management in the pursuit of change;
- Allocation of adequate resources;
- Development of sound ICT Business Cases to raise executive management's awareness of ICT value and benefits;
- Review, update and create new policies that will underpin the successful implementation of this strategy; and
- Finding a balance between the objectives of individual departments and adding value to the Eastern Cape Government system as a whole.

### 6.1 Critical Success Factors

The following are critical success factors for the implementation of the ICT strategy:

- **Evolving the Role of the DGITO:** Provincial ICT heads must be given the opportunity to contribute towards value creation in the Province and towards the objectives of the PGDP. ICT must be recognised as key to delivery of this strategy;
- **Communication:** A frequently updated communication plan with clear and timed messages regarding the ICT strategy and its implementation. This is essential to ensure continued drive by and buy-in from Provincial stakeholders;
- **Sponsorship:** Visible, senior sponsor that will be the face to the change plans and provide a single and consistent message regarding the programme. In addition, a centralised, cross-programme steering committee will help to provide consistent decisions regarding the implementation;
- **Participation:** A common goal needs to be established between players to ensure participation and buy-in. Key players may need to be incentivised/measured to ensure drive towards the ICT strategy implementation;

- **Centralised EPMO:** a centralised EPMO should be in place to coordinate the implementation of the ICT Strategy. The EPMO will perform the project management functions as well as the overall coordination function of the ICT strategy implementation;
- **Measurement:** clear measurement and criteria for success must be stated per programme to ensure suitable outcomes are achieved that drive out the strategy and benefit the Province;
- **Detailed planning and design:** The strategy outlines a direction for ICT within the Province. This must now be followed by the detailed solution design, which will further inform the ICT spend required as well as the programme duration;
- **Budget:** Provincial budget allocations until 2014 must be aligned to the requirements of the ICT Strategy; and
- **Speed:** In order to meet the challenge laid out by the ICT Strategy, it is necessary to act quickly, to allocate resources and to appoint any new staff or service providers necessary to complete the tasks.
- **Innovative Procurement:** ICT will have to explore and encourage new and innovative ways to procure keeping within the Supply chain frameworks and the PFMA. This may include testing procurement models like 'Rental' models to counter high costs and obsolescence in the ICT sector.
- **Cost cutting initiatives:** In the current scenario of worldwide economic downturn and its local ramifications, it is necessary for ICT to devise cost cutting initiatives that build Shared services models and pursue Top slice cut from provincial operational budgets to fund provincial ICT projects.

## 6.2 Programme Delivery Roles and Responsibilities

To effectively implement the Provincial ICT Strategy, a change management framework is required to drive out the change programmes stipulated in the ICT Strategy.

Imperative to the successful transformation of service delivery in the Eastern Cape Province are the following considerations:

- Recognition of the need for collaboration with ALL relevant stakeholders;
- Recognition of the need for greater commitment from senior management in the pursuit of change;
- Allocation of adequate resources;
- Development of sound ICT Business Cases to raise executive management's awareness of ICT value and benefits; and
- Finding a balance between the objectives of individual departments and adding value to the Eastern Cape Government system as a whole.

### 6.3 Proposed Stakeholders

The following are stakeholders that will be directly or indirectly affected by the strategic ICT programmes of change in the Eastern Cape.

| INTERNAL<br>STAKEHOLDERS   | EXTERNAL<br>STAKEHOLDERS  |
|--|---|
| <ul style="list-style-type: none"> <li>• The Premier</li> <li>• MECs</li> <li>• Director General (DG)</li> <li>• HOD and DDGs</li> <li>• Executive Mayors</li> <li>• Mayors and Councillors</li> <li>• Municipal Managers and CFOs</li> <li>• GITOs and Senior Managers</li> <li>• Middle management/ managers</li> <li>• Business Units Managers</li> <li>• Project managers</li> <li>• Human Resources, LR and Unions</li> <li>• SITA</li> </ul> | <ul style="list-style-type: none"> <li>• Industry CEOs</li> <li>• Universities – Management</li> <li>• Traditional Leaders</li> <li>• Citizens</li> <li>• SMMEs and Youth</li> <li>• Suppliers and Products Experts</li> <li>• Service Providers</li> </ul> |

Table 3: Stakeholder Groups

#### *Structures for Change*

An organisation experiences unique stresses during any transformation. Handled effectively, this will accelerate the growth of new capabilities; handled poorly, it can eliminate any transformational value. It is therefore crucial that the right people in the right positions are identified to support the embedding of change into the ECPG and wider environment.

The following are the suggested Initiative Owners, Stakeholders, and Initiative Managers: responsible for driving out the change programmes in the ICT Strategy.

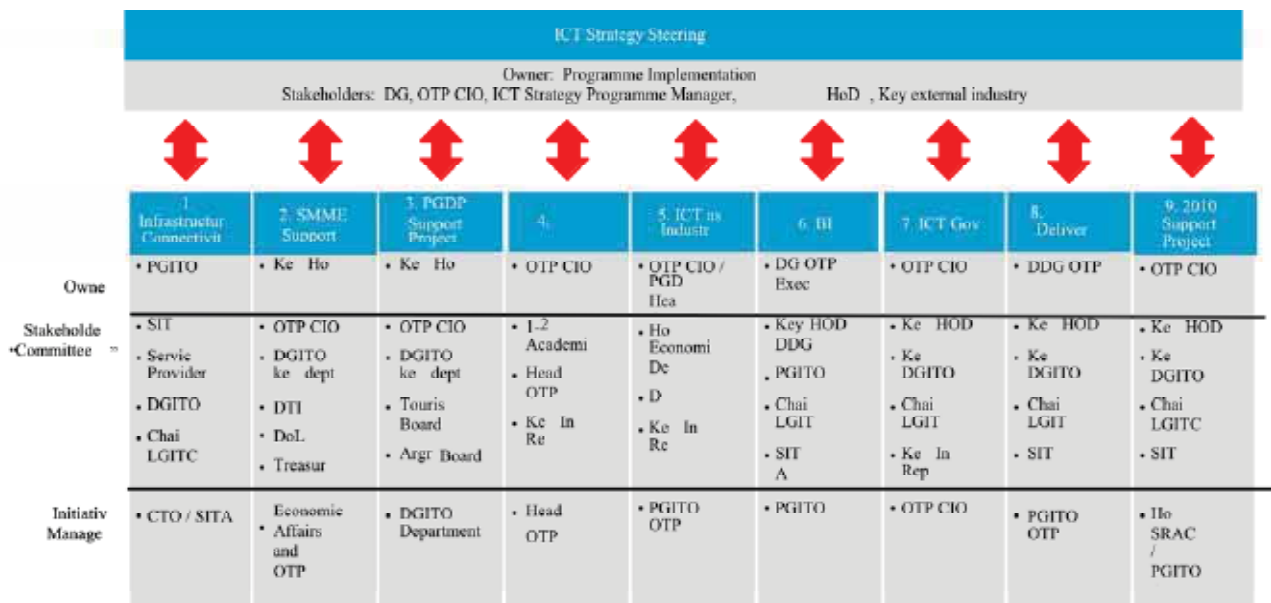


Figure 3: Proposed Delivery Structures

The following are the common key positions for each programme:

- **ICT Strategy Steering Committee** will be the team focused on driving the execution of effective, integrated, and well communicated change programmes across EC. The structure is intended to ensure consistency of processes, policies, architectures, and structures. The committee will also ensure coordination across the initiatives and with the affected stakeholders;
- **Change Programme Owner** will be the sponsor of the programme who is accountable for the delivery of the change initiatives within that programme;
- **Change Programme Stakeholder Committees** are the committees that will focus on driving change for specific programmes. These structures are to ensure that alignment with the overall objectives of the Provincial ICT Strategy and the realisation of its goals; and
- **Initiative Managers** are assigned from the EPMO to manage the day to day activities of the delivery of the individual initiatives within the change programmes.

# 7

## Conclusion



*Ikamva eliqaqambileyo!*



## **7. Conclusion**

It has been our quest with this strategy to address issues of service delivery, poverty eradication, development, social economic imbalances as well as create an ideal state for our children to aspire for. We are aware that the road to success will not be easy, but are together with our strategic partners we can steadily make progress towards the vision described in this strategy.

As we begin the implementation of this strategy, we look forward to demonstrating the central role of ICT in improved service delivery to the citizens of the Province, and ultimately contributing towards the national government goal of creating a “better life for all”.



# 8

## Glossary of Terms and Abbreviations



*Ikamva elizaqambileyo!*





## 8. Glossary of Terms and Abbreviations

These terms and abbreviations have been used within the ICT Strategy document:

|                      |   |
|----------------------|---|
| <b>AsgiSA</b>        | Accelerated and Shared Growth initiative for South Africa   |
| <b>BPA</b>           | Business Process Automation   |
| <b>BPO</b>           | Business Process Outsourcing  |
| <b>CIO</b>           | Chief Information Officer   |
| <b>CDMA</b>          | Code Division Multiple Access   |
| <b>CRM</b>           | Customer Relationship Management  |
| <b>PGITO COUNCIL</b> | Provincial Government IT Officer's Council  |
| <b>EA</b>            | Enterprise Architecture   |
| <b>ECPG</b>          | Eastern Cape Provincial Government  |
| <b>EDMS</b>          | Electronic Data Management System   |
| <b>ERP</b>           | Enterprise Resources Planning   |
| <b>FET</b>           | Further Education and Training  |
| <b>GIS</b>           | Geographic Information System   |
| <b>HRD</b>           | Human Resources Development   |
| <b>HW / SW</b>       | Hardware / Software   |
| <b>IAM</b>           | Identify and Access Management  |
| <b>ICT</b>           | <p>Information and Communication Technology</p> <p>Information and Communication Technology (ICT) is an umbrella term that includes any communication device or application, encompassing:</p> <ul style="list-style-type: none"> <li>• Radio</li> <li>• Television</li> <li>• Cellular phones</li> <li>• Computer and network hardware</li> <li>• Software, satellite systems etc</li> </ul> |

|                      |   |
|----------------------|---|
|                      | <p>It also includes the various services and applications associated with them, such as:</p> <ul style="list-style-type: none"> <li>• Videoconferencing;</li> <li>• Distance learning; and</li> <li>• eServices.</li> </ul> |
| <b>JIPSA</b>         | Joint Initiative on Priority Skills Acquisition   |
| <b>SITA</b>          | State Information Technology Agency   |
| <b>SP</b>            | Service Provider  |
| <b>SOA</b>           | Service-oriented Architecture   |
| <b>MISP</b>          | Management Information System Plan  |
| <b>NLRD</b>          | National Learners' Records Database   |
| <b>NQF</b>           | National Qualifications Framework   |
| <b>OTP</b>           | Office of the Premier   |
| <b>PGDP</b>          | Provincial Growth and Development Plan  |
| <b>PGITO / DGITO</b> | Provincial / Department Government IT Officer   |
| <b>EPMO</b>          | Enterprise Programme Management Office  |
| <b>PPP</b>           | Public-Private Partnership  |
| <b>R&amp;D</b>       | Research and Development  |
| <b>SETA</b>          | Sector Education and Training Authority   |
| <b>SLA</b>           | Service Level Agreement   |
| <b>SMME</b>          | Small Medium Micro Enterprise   |
| <b>SWOT</b>          | Strengths, Weaknesses, Opportunities and Threats  |
| <b>WiFi / WiMAX</b>  | Wireless Fidelity / World-wide Interoperability for Microwave Access  |





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